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CONTRIBUTED ARTICLES

Hive Entrances—Co-operation for Bee-Keepers

BY DR. O. C. MASTIN.

The advantage of large entrances has been referred to in the bee-papers several times lately. A report of my experience the past season may be of value to others.

I began the season with six colonies, in movable-frame hives, the entrances of which were very small—not more than $\frac{1}{8}$ the width of the hives, and about $\frac{1}{8}$ of an inch deep. Having decided to give the Danzenbaker hive a trial, I purchased 11 of them, and as the season advanced, looked anxiously for the appearance of swarms to put into them. But severe frosts destroyed most of the early bloom, and only two swarms came out—one June 5, the other July 9.

High winds throughout the season interfered with their flight, and hot winds during August greatly injured the golden-rod, so that, altogether, the season was a very poor one. Bee-keepers in the neighborhood agreed that it was the worst they had seen here.

Now for results: The swarms were hived on $\frac{1}{8}$ -inch starters of foundation. They built out the combs in the brood-frames nicely, and both swarms had abundant stores for winter in the brood-chamber at the close of the season. The first swarm gave 40 well-filled sections, and 10 partly filled; the other gave 20 filled sections, and 12 partly filled. From the other six colonies I secured 12 filled sections and about 20 partly filled.

I attribute the result largely to the difference in size of entrances, the Danzenbaker being $\frac{1}{8}$ -inch deep, and the full width of the hive. The bees in them never loafed, while at the other hives they hung out by the peck, day after day, when the weather was hot, altho all were well shaded by box-elder trees.

SOMETHING ABOUT CO-OPERATION AMONG BEE-KEEPERS.

I notice some very suggestive items in the American Bee Journal of Dec. 9, 1897. In George W. York's paper (page 770), appears the following:

"It [honey] should be found upon the plain, but neat and wholesome, tables of the toiling masses, as well as on the sumptuous boards of the rich and royal classes. The price of the article can no longer be urged as a barrier to its universal demand. . . . But how shall honey-producers proceed to create a more general use of their delicious and health-giving sweet, and consequently increase the demand? Education of the public is the great necessity. . . . It is little encouragement to have produced a big crop of beautiful honey, and then find that there is no established market for the same—no organized co-operative system through which the large crops can be distributed, or placed upon the market so as to yield the best financial returns. It has been discovered, I think, that it will not do to rely wholly upon commission-men. . . . Bee-keepers must some day be organized so as to handle and dispose of their honey themselves. They can do it. Then good-bye to the flowery-tongued commission-man, who is a veritable leech upon his fellow-men, and should long ago have been everlastingly retired to the robbers' cave whence he came."

Why are not all profit-takers leeches and robbers? Do they belong to the "toiling-masses," or the "rich and royal classes?" If some are more greedy than others, their crime is only different in degree, not in kind.

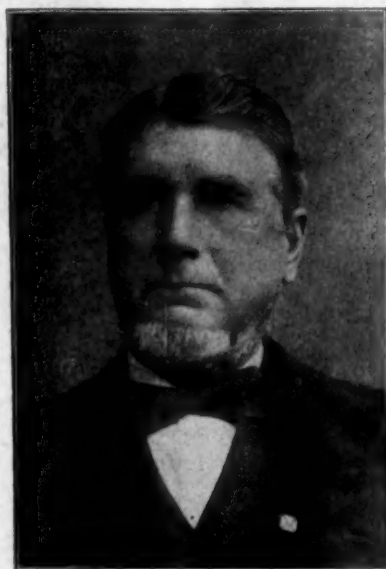
On page 771 (1897) Mr. R. C. Alkin says: "Competition, it is said, is the life of trade, tho in fact it is the death of it."

On page 773 (1897) Mrs. Harrison says:

"There was a wide field open to the ingenuity of our grandmothers. They spun wool, cotton and flax, dyed and wove, cut and made garments [reaped the full result of their toil], but now the inventive genius of man has superseded this with nimble-fingered machinery. . . . Their [the bees] law is like that of the Medes and Persians, which changes not—the greatest good to the greatest number."

On the same page Dr. Miller says: "In the old countries rates are so low that bees are sent to new pastures and returned by rail. We cannot do that in this country."

On page 777 Mr. York speaks of "eternally destroying our common foe—the abominable adulterators of earth's



S. N. Black—See page 132.

purest natural sweet." A natural result of competition and the profit-grabbing system. I notice also reports of very low prices for honey in California and elsewhere.

The above items are from some of the brightest lights in bee-culture (and I have been forcibly impressed with the fact, judging from their written articles, that bee-keepers as a class are far from being dull people).

Such remarks are thought-provoking. They show that there are some "screws loose" somewhere. Now, would it not be a good plan to discover just what the cause is, or causes

of the trouble are? The first thing to do in the cure of a disease is to remove the cause; and if the disease were a cancer it would be a poor doctor that would apply poultices as a remedy when it was possible to remove it completely by other means.

The causes are mentioned, and the remedy hinted at in the items quoted. The causes are "leeches," "competition," and "nimble-fingered machinery." The remedy—co-operation.

The leeches are profit-takers of various kinds. Consumers are generally obliged to pay several times as much as the producer receives for his labor, or the products of his labor; the profit-takers get the rest. As the profit-takers are a comparatively small portion of the population, and the producers are also the immense majority of the consumers, it is impossible for them to purchase the equivalent of the products of their labor with what they receive for it. And the profit-takers, being comparatively few in number, are unable to consume the balance. This condition is aggravated by "nimble-fingered" machines, which produce without being consumers; and the usury system, rent, etc., which the "toiling masses," as the great body of consumers, are obliged to support, further lessen their ability to purchase the products of labor. It leads to what demagogues call "over-production."

All classes of producers suffer from the same causes, and you may "educate the public" as to the food values of honey till the crack of doom, and, unless their ability to purchase is increased, the trouble will not be remedied. Immense numbers are thoroughly satisfied as to the food value of roast beef, who are not able to gratify their longing for this staple article of food.

Labor-"saving" machines are here to stay; the only question is, how to make a Christian use of them. (The producers should own and operate them, and divide the product equitably.) For a few to enjoy the products of the work of machinery which formerly went to partly satisfy the needs of human beings, can scarcely be called a Christian (Christlike) act.

"Competition is said to be the life of trade, tho in fact it is the death of it," says Mr. Aikin. "Perzactly." Competition is the opposite to co-operation.

There are estimated to be 300,000 bee-keepers in the United States. Under a competitive "system" (?) of industry necessity will compel a large number of them to dispose of their crop as soon as it is produced, and honey-dealers and commission-men will continue to largely regulate the price. Commercial fruit-growers are generally more "well-to-do," and fewer in numbers, and they can come nearer co-operating in the sale of their products. But why, in suggesting co-operation, should bee-keepers exclude other classes of producers? Not until all producers unite and adopt a system of production and exchange which will largely or altogether eliminate the profit, will they improve present conditions to any considerable extent.

I would urge all who are interested, to procure and help extend the circulation of Edward Bellamy's book, "Equality," recently published. Price, \$1.25. Holt Co., Nebr.

[We can furnish the book referred to above, by Dr. Martin, upon receipt of the price named.—EDITOR.]



Selling Honey Produced in Frames Holding 4 or 5 Pounds Each, Etc.

BY W. W. M'NEAL.

The pound section, when properly filled with nice, white honey, aside from being so very convenient for retailing purposes, certainly looks temptingly good. But now let me tell how I managed to dispose of several hundred pounds of very nice honey I secured last season in frames holding about four or five pounds.

Well, there was nothing wrong with this honey, more than that there was too much of it to the frame for the grocery trade. I got a number of bright, new tin pans that were just large enough to fit in my regular honey-cases, crosswise, putting in four to the case. This honey was cut into blocks of something near a pound, so that a given number would fit the pan snugly. The comb was first laid on a framework with a wire covering so that the drippings would run through into a pan placed below. Then each piece was taken and neatly folded in paper, the same that the creamery-men use for their butter. This paper is entirely different from that usually found in the groceries.

Take a cake of this honey in your hand, turn back the corners of the clean, white paper, and take a look at the edge

of the rich, sparkling thing inclosed, and if it doesn't make you want to lick it, it's all because you haven't got a natural taste.

QUEEN STINGING A WORKER—WORKER-BEE IN A QUEEN-CELL.

Here are two things I witness the past summer: The stinging of a worker-bee by a virgin queen; and a dead worker-bee in a capt queen-cell. The queen was the largest virgin I ever saw, and had been caged two or three days in the hive. When I turned her loose on the comb she seized a worker and quickly stung it to death. But this did not pacify her, for she immediately caught two more, and tho she did not kill these she handled them so roughly that when releast they showed plainly they did appreciate her action.

The worker-bee in a queen-cell was evidently due to its having crawled into the cell for a final inspection when it was being constructed, the cell being capt over by others. The young queen was also dead. Scioto Co., Ohio.



Buying High or Low Priced Queens—Which?

BY G. M. DOOLITTLE.

I am led to write a few words on the above subject, because many, apparently, do not seem to understand how to discriminate a long the line of buying queens, especially those just entering the enchanted field of apiculture. Why I say "enchanted field" is because many go wild over the pursuit before they are hardly initiated therein, thus causing them to pay out money unwisely (money earned through sweat and toil in other pursuits that is often actually needed in the family), for high-priced queens, when such queens are of little if any more value to them than would be queens costing not over one-fifth as much.

The wonderful traffic which we have of late years in queens, has sprung up for two reasons, the first of which is a desire for the improvement of stock; and the second, the call for queens by those who do not wish to rear their own, but wish queens to keep as a reserve force, ready to use in case of queenless colonies, or in giving to the queenless part of a divided colony, whether divided by the apiarist or by natural swarming.

This latter class have in view only one object, that of procuring fairly-good queens at a minimum cost, expecting no more of them than that they will produce plenty of fairly-good worker-bees to secure the honey which their field supplies, and preside over their colonies as all good queens do.

The first or other class buy queens, or should do so, with a different object in view; that is, they want queens which have other value beyond being fairly-good queens in producing bees for the only purpose of honey-gathering, as they wish them for "breeding purposes," with a view to the improvement of the stock they already have. The greater the improvement which can be obtained by rearing young queens from the one purchase, and crossing them with drones from the bees we already have in our apiaries, the greater the value of the purchase queen; for therein lies nearly all of the extra value there is in a selected imported queen, or one from the apiary of the best breeder in the world, above a queen reared in your own apiary, without painstaking on your part.

Mr. Alley surprised the world a few years ago by telling that he had a queen worth \$100, and others have told us about queens whose bees work on red clover. Still others have spoken of queens of extra value as giving bees with longer tongues, giving bees that were hardy for wintering, bees that capt their combs so as to present a snowy whiteness, etc. But had you askt any of these if they considered there was \$100, \$50, \$25, \$10, or even \$5 worth in such queens to place in a box-hive, or in a frame hive that was workt only for the honey which could be obtained, they would have told you at once that their worth did not consist in the amount of honey the bees from this individual queen would produce, but in the good qualities she possess as a breeder, which good qualities were expected to be perpetuated in her queen offspring, and in this way, when multiplied by 25, 50, 100, 1,000, 10,000 or 50,000 times—just in accord with the number of queens reared from her—would the real value become apparent. No one queen can be worth even five dollars for what extra honey her bees will produce over the ordinary average of queens; hence it comes about that a costly queen should be procured for only one purpose, which is for the improvement of stock. That all do not buy for this purpose is often very apparent. To illustrate:

Two parties in one of the Western States ordered queens of a \$5.00 class, one ordered three, and the other a single queen. Supposing that each knew what he was about the breeder sent on the queens without questioning in the matter.

About a year afterward he received a letter from each, one writing that he had kept the queen that was sent him, in a two-frame nucleus during the breeding season, thus allowing her to lay but few eggs during the breeding season, that her life might be prolonged so as to cover several years, this showing that he was more wise than many of our old queen-breeders, who allow some specially good queens for breeding purposes to wear themselves out in egg-laying in a year or two. He further wrote that he had reared over 500 queens from this mother, and expected to rear thousands before she died of old age, to be used in his own and his neighbors' apiaries, as the daughters were the best queens for business of any ever had in that locality. He wrote that he was satisfied that the amount paid for the mother was the best investment he ever made.

The other person wrote that he thought the queen-breeder was unreasonable in charging \$5.00 each for such queens as had been sent him; that he had tested them beside the queens which he already had, and that he could not see that they produced enough honey above what his own queens gave to compensate for the large price he paid for them. Further writing brought out that he had not reared a single queen from either of the three, and as one of them did not seem very prolific, he thought he would not breed from any of them, for he believed that no advantage would come to him from so doing.

Again, a party in Australia ordered four such queens, taking all the risk on the same, and then allowed the only one which reached him alive to die some months afterward without trying to rear a single queen from her.

I might give many other instances of like character, but as they would only illustrate the same thing, it would be only a waste of space and time. If bee-keepers do not purchase queens with the expectation of using them to breed from, then the low-priced queens are just as good as any, and the purchasing of those of the costly grade is simply throwing away their money. "A word to the wise is sufficient."

Onondaga, Co., N. Y.



Bees Moving Eggs—Questions to Think About.

BY D. H. WELCH.

There are some things taught by the masters of bee-lore, and published in our bee-literature, concerning which I think we need better evidence before we accept as true. The bee, "*Apis Mellifica*," is so liable to do unexpected things, that it is easy to make an assertion based on practical observation, that under different conditions will result in work so diverse from the first that one is apt to say, "I don't know," unless we jump to this, that or the other conclusion and rush it off to be printed as the most important discovery of the age. And being so important, it is likely to be copied by other journals and publications, and, after one or two such transcriptions, come to be given as facts taught by Mr. D. or E., or O., or Dr. M. or T.

One of these is the common statement that bees move eggs and larvae from cell to cell, and possibly from hive to hive. We often read statements regarding the truth of this matter. Of course, positive evidence, if valid, counts for everything. To the entomologist or student of natural history, or even to one who has observed and studied the egg of the bee, it would seem a pretty delicate operation to remove it from one cell and place it in another, much less from one hive into another; nor do we find worker-bees possess of any such delicate, tactile organs, such as we would think requisite to this removal. But the close observer of natural economy constantly comes in contact with so many strange things, that he does not place much stress on any seeming impossibility, surely not in the face of positive evidence that the thing is done. Every day we see examples of egg-carrying insects (ants, for instance)—why not bees?

About five years ago I purchased a number of colonies about June 10. They were in box-hives heavy with brood and honey, therefore not in the best condition for moving, but the neighbor of whom I purchased wanted the "holy terrors" moved away at once. In the transfer a comb was broken loose, so after the hives were placed in position, this comb being full of brood, was placed against the outside of the hive, and a board placed over it, to protect it from sun and rain, thinking that, possibly, the bees would care for the brood and then abandon the comb. They did care for the brood, but did not abandon the comb—instead, it was occupied and used until Sept. 1 for brood, cells being occupied as regularly as if a queen had been in possession. I did not see bees carrying eggs, nor did I see a queen on the comb. I know only the

fact—it was done—but how? The mere assertion of the fact is no proof, and doesn't solve the problem.

Another fact for the masters of the profession to discuss occurred during the season of 1897. A small box-hive colony, presumably crowded, proceeded to build comb under the alighting-board, and it, too, was used as a brood-comb throughout the season. Why? How? The closest observation failed to reveal the secret of the mystery.

Harrison Co., Ohio.



A New Self-Hiver, Queen and Drone Trap.

BY GEO. W. WILLIAMS.

[Mr. Williams shows herewith a new and improved drone and queen trap that can be used as a self-hiving arrangement. The illustrations are so plain that perhaps no further description is needed, so we publish herewith the directions which Mr. W. has prepared, and which explain pretty fully the trap and its varied uses.—EDITOR.]

See that the center or cone slide is pushed so that the cones are open, and the door in the end is closed; place the trap and fasten on the hive as shown in Fig. 1. When the swarm issues the bees will pass out through the perforations in the

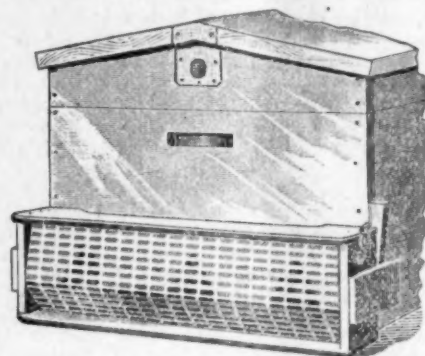


Fig. 1.

Fig. 1.—Front view when in place; also manner of attaching to the hive.

zinc, but the queen being larger cannot get through, but in trying to get out she will find one of the cone holes and run up into the upper part—she will usually do this by the time the swarm is all out, and can be easily seen up there in front trying to work through the zinc.

Take the trap off the hive, and while holding it in an upright position, reach in behind and close the cones by pushing the tin slide as far as it will go, thus completely caging her. Set the hive you wish to have the swarm in by the side of the one they issue from, throwing some old cloth or covering over



Fig. 2.

Fig. 2.—Back view of the trap bottom side up, and showing cone slide partly slipped over the openings in cones, which, when entirely slipped off shuts off communication from one story to the other; also shows back slide partly drawn out, which, when the trap is in position to receive or have the swarm, opens communication between trap and hive.

the old one to hide it from the bees; place the trap bottom up on the new hive, draw out the back slide which opens communication with that part of the trap the queen is in and the hive, and—well, the bees will do the rest. As soon as they miss the queen from the swarm, they will return to the hive they issued from, and will find her and go into the hive together—thus hiving themselves.

If it is preferred—as many bee-keepers practice—to move the old hive to a new place and set the new hive on the old stand after the queen is trapped, and while the bees are swarming around hunting for her, set the old hive to one side, and the new one on the old stand, placing the trap on as before. In this plan there is no need of covering the old hive, as it is away from where it was when the bees went out.

Occasionally a swarm will cluster (settle) before they miss

their queen, but if you have her in the trap, fix your hives as before and go about your business; they will break cluster and come back and hive themselves.

After they are hived, if you are afraid they will become dissatisfied and leave—as they sometimes do—leave the trap on as it is; if they undertake to go away they cannot get the queen out, neither can she trap herself for the cones are inverted and closed; when they go to work remove the trap.

When the swarm issues, if it is desirable to use the queen for any other purpose, when she is seen in the upper story remove the trap, close the center slide and take the trap where the bees cannot find it (the swarm will return to the old hive), roll an old cloth around the trap to darken it, and open the little door in the end, holding a wire queen-cage over the hole. The queen will be attracted by the light and run in.

To keep the bees from swarming, put the trap on the hive bottom up, with the cones and end door closed, and with the back slide drawn out. When the swarm issues the queen cannot get out nor trap herself, the bees will miss her and return; this they may do several times, or until the young queen hatches out, when the old queen will usually kill the young one, and the bees will usually tear down all remaining queen-cells, which breaks up the swarming-fever in that colony.

In working it as a non-swarm, the drones that accumulate in the trap should be let out every evening by opening the little door in the end, and they will fly out, and not being able to get back will be found the next morning on the alighting-board, cold and chilled, when they can be raked up and destroyed—a thing much to be desired when we do not want increase. I find this works more satisfactory to me than trying to keep all queen-cells cut out, and requires much less labor.

To simply destroy undesirable drones, set the trap on the hive as for catching the queen; when they come out to take their afternoon flight they cannot go through the zinc, but will find their way into the upper story, and late in the evening or early next morning they can be destroyed. A good way to do this is to immerse trap and all under water for a few minutes.

To stop robbing place the trap on the hive being robbed, and if they have not surrendered they will keep out what few robbers that are bold enough to venture into such close quarters.

Polk Co., Mo.



Ontario Convention and Foul Brood Inspector.

BY EX-PRES. J. K. DARLING.

As this is the season of conventions, I send a few lines anent the meeting of the Ontario Bee-Keepers' Association, held in Hamilton, Ont., last December. The weather was very mild, and as there was some rain there was a little mud, but we had to get off the pavement if it gave us much annoyance. Hotel accommodations were good, and we had a good attendance. There were several other meetings held that week at Brantford and Guelph, and still the unanimous verdict was that the Hamilton one was the best convention we have had for years. The papers were good, and the discussions brought out by them must prove very profitable. As the stenographer's report will be published in the Canadian Bee Journal, and perhaps some portions of it in other papers as well, I shall not attempt to give a synopsis at this time.

I would like, however, to notice one little episode, and perhaps in doing so I may correct any erroneous impressions it might have left on the minds of some of those who were present.

A discussion having arisen about the manner in which our efficient inspector of apiaries had managed the business entrusted to him, it was stated by some that he had not "fired" as many colonies as he ought to have done, and the impression was left on the minds of some who were present that the speakers wished it understood that the inspector had not seen that foul-broody apiaries were properly cleaned up. I do not know as that was the impression the speakers wished to make, but that was the way it was understood by some of those present. I wish to say that the facts in the case are just the reverse.

It is rather unfair to strike a man between the eyes when his hands are tied behind his back. Some of those speakers know, or ought to know, that the inspector is gagged, if not by statute he is by order of the association, and yet these insinuations are thrown out when the inspector cannot open his mouth in self-defense, or call on persons who are in a position to testify to his thorough work. At the time this discussion took place, there were nearly a dozen bee-keepers present who could have done so, and one or two did stand up for him, but as a general rule bee-keepers do not want it known that they

ever had foul brood in their yards, especially if they are selling bees or queens.

During the past year I have been in a position to know something of what I am writing about, but like the inspector, I must tell no tales. What I want to say is, that his work is well done; first, by making a success of the curing and building up of apiaries instead of burning, and so put the owners in a position to secure a good crop of honey if it was to be had; second, by getting cases settled in a friendly manner, that might have developed into ugly lawsuits through parties having disposed of colonies that were diseased; and third, by doing this in such a quiet and disinterested manner that no harm would result to the business of either party because of their having their bees diseased, and I have yet to learn of the first case that ever went to court after being placed in his hands.

Mr. McEvoy is in a very difficult position, and if he could please everybody we would expect to find him something more than human. I will make a few quotations to show that I am not the only person who takes this view of the matter. When the Foul Brood Bill was before Parliament, and before any inspector was appointed, the late Allen Pringle wrote: "If we can get a suitable man for inspector, with the whole Province to choose from, we will do well." And as proof that time and circumstances had not changed his opinion of our first choice, he stated at the meeting of the North American, in Toronto, that it would be a "mistake" for those having foul brood in their apiaries not to get the "foul brood inspector" there at once.

Mr. R. F. Holtermann, of the Canadian Bee Journal, in summing up the good, if not the bad, qualities of the various officers of the Ontario Bee-Keepers' Association, in a former number of his journal, said:

"There is no man who has met as many bee-keepers face to face in Ontario as has our foul brood inspector, Mr. McEvoy. There are many men qualified to fill the position of every officer in the Association, but only one man can fill the position of inspector, and that man is Wm. McEvoy."

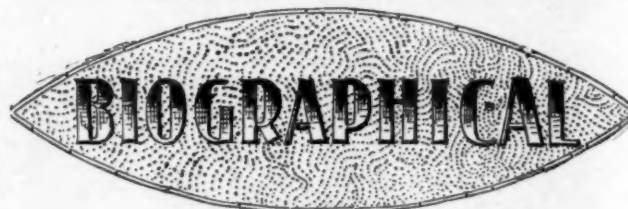
Once more: When that successful and practical apiarist, J. B. Hall, was president of the Ontario Bee-Keepers' Association, he said:

"I feel that as bee-keepers and as an Association, we are greatly indebted to our representatives in the legislature of Ontario, for their generous and kindly feeling to the apiarists of Ontario, and especially for giving the Province an efficient foul brood inspector, whose services are put at our command. I am also pleased that the bee-keepers throughout the Province, excepting one or two would-be scientists, have cheerfully, willingly, and thoroughly, followed the inspector's instructions, and made a clean job by so doing, now have clean and healthy apiaries, and will be in a position to reap a bountiful harvest, if the Ruler of all causes the nectar to secrete in the flowers."

Mr. Hall knew what he was talking about, for as president of the Association the work of the inspector had to pass under his supervision.

I trust the above is sufficient to correct any false impressions that may have been made by the discussion above referred to.

Ontario, Canada.



S. N. BLACK.

Mr. S. N. Black, of Adams Co., Ill., whose picture we show on the first page this week, is one of the oldest bee-keepers we know, hence we are pleased to be permitted to show his honest face, and give a few facts regarding his busy life, in the American Bee Journal. Here is what he has to say:

I have a shadowy recollection of coming from Tennessee to this place a little over 64 years ago. The country at that time was nearly a wilderness. Our nearest neighbor was a Presbyterian preacher, and looked enough like Father Langstroth to have been his brother, and, like him, was well posted

in bee-keeping. His yard was filled with "bee-gums," as they were then called.

Very soon I was installed as chief assistant in the beeyard, taught how to find the queen and to clip the wing to keep the bees from leaving; that I must not clip the wing of a virgin queen, etc. When I was perhaps seven years old I was running a threshing machine—I was riding one horse and leading two more, treading out oats, the fastest we had of threshing grain! A swarm of bees past, and I left my "threshing" and followed the bees till they settled. I got a "gum" and hived them, and I have owned bees from that day till this, and possibly I have their descendants now.

I had never seen a moth. They had not made their appearance yet, and how horror-stricken I was when I found my pet "gum" that had swarmed four times, one solid mass of worms! I thought if the moth could kill one "gum" they could kill all; but my teacher told me the bees were doubtless queenless, and if I kept the bees strong and lookt after them a little there was not much danger.

I took care of my father's and my own bees till 1855, when I found my "queen-bee" in Miss Sallie E. Crippen. Following the custom, I "swarmed," and set up a new apiary. The old way to get honey was to kill the bees as soon as the frost killed the flowers, but I never killed any bees. I had the tops of the "gums" so they could be taken off, and the honey taken out, often cutting out the top several times in a season, and I dare not tell how much honey I have taken in one season from one colony, spring count—and I am ashamed to tell how little some seasons!

I think it was about 1857, while working with the bees, a man drove up with a movable-comb hive, and as I did not buy at once, he made me a present of a "right," if I would buy or make a hive. I used King's for awhile, then adopted the Langstroth 9-frame. Like many others, I "invented" (?) hives of my own, and very nearly struck a good thing in making the hive taller and using two small frames in the top for surplus honey, getting near the section of later days.

The seasons here have been very irregular—some extra good, others equally poor, with the poor seasons in the majority. Three good seasons left me with over 100 colonies of bees, and enough money in pocket to induce me to give the bees more attention; but the extra-poor seasons came on—one, two, three, four and five, all together—and I about decided that this was a good place to "not keep bees," so I gave away bees, and some died, till last spring I had 8 weak colonies. Late in the spring came warm showers, and such breeding of bees I never saw—every comb was full of young bees, even to the outside, and last fall I had 30 strong colonies and 400 pounds of honey.

Twenty-five years ago nearly every farmer had bees; to-day I know of four or five persons with bees within four miles of me. The moth is very scarce now. I think they must fly quite a distance, for when bees were plenty within one and two miles, any comb left exposed was soon filled with worms; but comb left out last summer was not molested.

In the many years' experience I think I have gathered a great deal of wisdom, especially in the line of what I don't know—in fact, I think I surpass Dr. Miller in *not knowing*.

S. N. BLACK.

Success is the title of the finest monthly magazine of inspiration, encouragement, progress and self-help for young people that is published to-day. The price is \$1.00 a year. We can club it with the Bee Journal, both together for \$1.80. If you wish to see a sample copy of Success before subscribing, send 10 cents to The Success Co., Cooper Union, New York, N. Y., asking that a late copy be mailed you. We hope to receive a large number of subscriptions for Success. You can't do a better thing than to order it for a year as a gift to some young person of your acquaintance. We have examined the magazine carefully, and know whereof we speak.

A New Binder for holding a year's numbers of the American Bee Journal, we propose to mail, postpaid, to every subscriber who sends us 20 cents. It is called "The Wood Binder," is patented, and is an entirely new and very simple arrangement. Full printed directions accompany each Binder. Every reader should get it, and preserve the copies of the Bee Journal as fast as they are received. They are invaluable for reference, and at the low price of the Binder you can afford to get it yearly.

Every Present Subscriber of the Bee Journal should be an agent for it, and get all others possible to subscribe for it. See offers on page 91.

CONVENTION PROCEEDINGS

Report of the Northwestern Bee-Keepers' Convention, Held in Chicago, Nov. 10 and 11, 1897.

REPORTED BY A SPECIAL BEE JOURNAL REPORTER.

(Continued from page 118.)

SECOND DAY—FORENOON SESSION.

The convention was called to order by Pres. Miller at 9:30 o'clock, and the first question taken up read as follows:

BEST BEES FOR HONEY AND PREMIUMS.

"What class of bees are the best honey-gatherers, or premium-takers at our fairs?"

Mr. Whitcomb—Having been in charge of the apiarian department of Nebraska the past 14 years, I have taken pains to follow this matter up pretty thoroughly. We offer in that State a premium for the largest amount of honey stored by a colony during a year, \$25, \$15, \$10, and \$5, making four premiums. This is verified under oath, showing how the colony was wintered, what kind of a colony it was, how it was built up, what the bees were, etc., and then a detailed account of the amount of honey taken. These, together with the premiums awarded on comb honey, etc., I have followed up, and I find that in 99 cases out of 100 they have been taken by the hybrid bees. We talk Italians in our apiaries and at home all the year round, and then when we go to our State fairs we find that the mixt blood has taken off the premium, producing the better honey, storing more of it, etc. These matters are really significant. While the Italian bee is nicer to handle, is less easily alarmed, etc., and less pugnacious, at the same time we find that something else is doing the work everywhere. At every turn we run across the hybrid bee.

Pres. Miller—Would you advise, then, Mr. Whitcomb, that we should try to keep none but hybrids?

Mr. Whitcomb—No, sir. I think that we must have Italians in order to get the good hybrids, that we must keep mixing. If you let them run into hybrids, they will run out, and get to be a small bee. I find no more trouble in handling the hybrid bee than I do the Italian, only I find I need to take a little more time for it.

Pres. Miller—Don't you think that the man who tries to keep up Italian blood will have all the hybrids he wants?

Mr. Whitcomb—Yes, sir.

Pres. Miller—Isn't this true, too—you say that 99 out of every 100 of the colonies are hybrids—

Mr. Whitcomb—99 per cent. of the premiums are taken by hybrid colonies.

Pres. Miller—Isn't it true that the hybrids so far outnumber the pure stock, that we ought to expect them to take a larger number of premiums?

Mr. Whitcomb—With me they don't. In the 30 I have, but two colonies are hybrids.

Pres. Miller—I am not talking about you, but about bee-keepers in general.

Mr. Whitcomb—Among farmers and small bee-keepers you find more hybrids than anything else. In Pennsylvania this fall I found no pure Italians—what might be called pure Italians—and I found them so cross that they would come out in the road, before I got to the apiary, and meet me.

Mr. Thompson—From your experience, do you get more honey from your hybrids than from your Italians?

Mr. Whitcomb—Yes, sir; I get more honey, and a more salable quality.

Mr. Green—I wouldn't agree entirely with Mr. Whitcomb. While I would admit that the hybrids are generally very good workers, indeed, the largest yields I have ever had were from pure Italians.

Mr. Baxter—It depends on what you mean by quality. If you are talking of comb honey, why, there might be the possibility that the comb honey produced by the bright black bee looks a little nicer than the honey produced by the Italian, but when you come to the quality of the honey, I beg to differ there. The quality of the honey produced by the Italian, if anything, is better than that produced by the black bee. That is, the honey itself. The reason it looks better is, that the

Italian puts the capping right close to the honey, and it has the color of the honey, while the black leaves an air-space between, and it looks whiter. I have been buying bees for 20 years, and experimenting with them. I have received queens direct from Italy, and from the Isle of Cyprus, have tried different strains in this country, and I make it a rule to breed up my bees, and I can say, beyond any chance of being contradicted, that the pure Italian is the best honey-gatherer; and I don't breed for size, either. I have some large bees that are not worth anything, and I have some little bits of things that will gather more honey than any large bees I ever saw. I look for the most gentle bees—bees that I can take up in the frames and carry into the house and not a bee move, and I have done it very often without a veil. The pure Italian bee you can hardly alarm, while a black bee, the blacker it is the more fussy it is. That is an experience everybody finds. In the fall of the year, after a right dry season—like this fall, for instance—I go to a hive, look in front, and I will say, "Hello, these look pretty black; I will bet they have no honey." Open the hive, and sure enough, they have hardly any honey. It is scattered all through the hive. There isn't a frame that is full half way down to the bottom. Go to the next hive, and—"These are pretty quiet, they look pretty nice." Open the hive, and it is a fact, I can tell almost by looking at the front what the inside of the hive will be. Year after year my experience is, that we should do away with the hybrids as much as possible; get your stock as pure as you can. I don't care how much you work with them, there will be hybrids all the time. I will have a nice Italian colony here to-day, and probably two years from now it will be almost black. I say, take pure Italians, the purer the better, every time.

Dr. Besse—My experience is that the full-blooded Italians are very pleasant to work with. Almost all of mine are full-blooded Italians. I have some hybrids, and I must say that they build whiter honey, when it is first finished up, than the others, but if you keep it a few months the cappings will settle down on the honey, and then you can see no difference at all; that is, if you keep it in a warm temperature, the cappings will soon settle down and leave it the same color that the Italian honey is. But when it is first taken out it is beautiful. I have four or five colonies that are almost black, and I must say I took from them this year the handsomest honey I ever saw. It was almost as white as snow; but I noticed, before I left home, that what I had not sold was changing and getting darker in color. I think the black bees store just as good honey as the Italians. And I must say this, that I got from a hybrid colony more honey than I ever did before from any colony, altho at least $\frac{1}{2}$ of my bees are full-blooded Italians. The Italians are much pleasanter to handle, but I think if you will smoke the black bees enough you can conquer them. I have blacks you can handle without any smoker at all. I never use a bee-veil, and it is very seldom I get stung. But, in order to be safe, I generally give them a little puff of smoke before I go to work.

Mr. Thompson—Which give you the most honey?

Dr. Besse—The most I ever got was from hybrids. The most I got this year was from hybrids. I took from one colony of hybrids 224 one-pound sections, all well filled, and the whitest honey I ever saw.

Mr. Thompson—It must have been a stronger colony than the others.

Dr. Besse—A stronger colony, and they didn't swarm. I kept piling on the section-boxes. May be others, if I had watched them as closely, would have done as well. But they got a start.

Mr. Baxter—I would ask if Dr. Besse has noticed that Italians will travel much farther for stores than the blacks.

Dr. Besse—I think they will. I would see them further from home. I don't know about the black bees. I don't keep many blacks. My opinion is, from what I have heard and read, that the Italians will go farther than the blacks will.

Mr. Baxter related an instance which led him to believe that the Italians traveled farther than the blacks.

Mr. Baldrige—I understood Mr. Baxter to say that the blacks capt their honey so that it looks whiter right over the honey. Is it true that all black bees do that?

Mr. Baxter—That has been my observation. I don't know whether it is generally so.

Mr. Baldrige—That is not my experience. I think I have seen lots and lots of honey that was capt by the Italians almost as nicely as the blacks. The Oatmans changed their bees to Cyprians the time that idea was prevailing, and they had a serious loss in the sale of their honey. They told me they lost one or more cents a pound, and they got rid of that blood as fast as they could.

Mr. Green—This matter of the quality or, rather, the appearance of the honey, is a very serious matter. But I will

agree with Mr. Baldrige, that it is not all strains of Italians that will produce this watery-looking honey. Pure black bees will cap their honey so that it has a chalky-white appearance, and that continues with some of the darker hybrids, but we can get the pure Italians that will cap honey almost the same as the black bees, not to that chalky-whiteness, but practically just as nice. There are only a few strains of Italians, and possibly none of the pure Italians, but those mixt with Cyprians and Syrians, that put the capping down on the honey and make this watery appearance. I had a strain of bees I had neglected breeding up for several years, and they got badly mixt, but they produced practically just as nice honey as the black bees. They were originally from Doolittle's strain. There are other breeders in the country that have the same strain, and they can be obtained, or almost any body, I think, could breed it up.

Pres. Miller—Doesn't the flower that the honey is gathered from have considerable to do with that watery-appearance of the honey?

Mr. Thompson—No.

Pres. Miller—It may have something to do with it, but then the watery-appearance depends mainly on the fullness of the cell, and the different bees make that. I may say that I hear and read with some degree of surprise, the so commonly exprest opinion, that the Italians make so much darker combs than the others. It comes from so many quarters I can't dispute it, and yet thousands and thousands of pounds of honey I have produced, with pure Italians and hybrids of all sorts, and I have never had that fault to lay at the door of the Italians. I don't think they are all alike. I believe, if you are trying to keep pure Italian stock, you will have fresh crosses all the time; and the more distinct the cross, perhaps the better will be the result. I think the best workers I have had within the past two years are of that much despised stock, the Punics; and this is because, I think, there was a very distinct cross—they were not the pure stock. But they're bad about gluing. If you want to sell propolis, get Punic bees.

Mr. Baxter—I believe you practice moving your bees around to different yards, do you not?

Pres. Miller—Yes, I take them out in the spring, and back in the fall.

Mr. Baxter—Have you ever noticed that that makes a big difference in the amount of honey produced?

Pres. Miller—Decidedly.

Mr. Baxter—I move an apiary to a certain place, and that apiary will produce more honey than the same amount of bees elsewhere. It isn't always in the bees alone. There are other things to take into consideration.

Pres. Miller—I have supposed that it was the pasturage.

Mr. Baxter—I can't account for it in that way.

Pres. Miller—I can hardly believe that the moving itself would do it, because that is simply the shaking up. If that would do it, all that you would need to do would be to go and kick all of your hives.

Mr. Baxter—I don't know but what that would be a good idea.

Mr. Baldrige—Do not bees get in the habit, if permanently located, of going certain directions, and continuing to go in certain directions, whereas, if moved to a new location, they have to hunt their pasturage more, and find a greater variety of pasturage? Don't they follow each other, to a great extent, in the old locations, and neglect some fields that may be within reach of them?

Dr. Besse—My experience is, they find forage wherever it is close by. Mr. Baxter says the Italians store richer and better honey than the hybrids. I think the reason is, they work very industriously on the common red clover, and you won't see the hybrids or black bees working on the red clover at all; and the red clover makes very fine honey, a rich-flavored honey, and a little darker than the other grade of honey.

[Continued next week.]



Report of the Maryland Bee-Convention.

BY W. J. VALENTINE.

The bee-keepers met in Hagerstown, Md., to organize a bee-keepers' association. The meeting was called to order by S. Valentine, who was elected chairman of the meeting, and W. J. Valentine was elected Recording Secretary.

S. Valentine stated the object of the meeting. In his opinion the time had come for the bee-keepers to have a union as much as any other industry; that apiculture is no longer a secondary business, but that it had grown to be a industry of itself; that bee-keeping of to-day is not what it was 50 or 25 years ago; apiculture had developed into a science. He who expects to be a successful bee-keeper must

become familiar with the habits of the bees, and work his apary scientifically, thus the necessity of a union that we may exchange opinions and further the cause of bee-culture, and to add to our mutual benefits.

It was also stated that the product of the honey-bee has been shamefully abused by adulteration, at the expense of the apiarist, and needs protection by legislation as much as any other industry.

It was decided to organize temporarily at present, and defer the permanent organization until the next meeting, and then draft a constitution and by-laws.

A committee was appointed to confer in regard to the adulteration of honey, composed of Chas. H. Lake and L. A. Hammond.

The convention meets again in Hagerstown, March 8, 1898, for the purpose of organizing permanently.

Chas. H. Lake, of the Maryland Agricultural College, was requested to prepare a paper on "Adulteration of Honey," to be read at the next meeting. W. J. VALENTINE, Sec.



Borage for Smoker-Fuel.—Borage is an excellent honey-plant, and it is recommended, in *Le Rucher Belge*, to dry its leaves, which contain much nitre, and mix them with rags to burn in the smoker.

The Finest Honey in the World has been discovered. According to an item in the *Pacific Bee Journal*, it is found in the Carliere mountains of Madagascar. But somehow a dim recollection comes up that the finest honey in the world has been located in sundry other places.

Mixt.—N. Genn has no entrance in hive or floor-board, but raises his hives on lath. A man asks, in *Gleanings*, how Genn does in winter? The editor replies that Dr. Miller uses a reversible bottom-board, and heads the item, "Hiving Swarms on Poles." And his father is such a strong temperance man!

"The Life of a Worker-Bee is about 45 days of actual working time, or about 80 days from the time the egg is laid until the bee has died from overwork, if there has been a flow of nectar."—Geo. W. Williams, in *Progressive Bee-Keeper*.—Maybe Doolittle better let up on Alkin for awhile, and straighten this out.

Reversing Sections in the Super, for the sake of having them finish to the bottom-bar, seems to have died out. R. C. Alkin says, in *Progressive Bee-Keeper*, the plan was a failure with him, because some sections would not be far enough advanced for the comb to stand alone on its head, while other sections were already completed.

Doesn't Like the Fence.—Editor Leahy, of the *Progressive Bee-Keeper*, thinks fence separators are not durable, too many sharp corners to get knocked off, plain sections will look too much like something with its ears cut off, and bees won't make any even work than in the old section. But he hopes they'll be a success, as they can be sold cheaper.

Honey the Cheapest Bee-Food.—A writer in the *British Bee Journal* says: Years ago we bee-keepers used to turn all the honey into money we possibly could, and any deficiency in winter-stores was made up with sugar-syrup. This was thought to be a good stroke of business; but I for one have lived to learn that honey is not only the best, but, all things counted, by far the cheapest bee-food.

Hauling Bees to the Bean-Fields in California is not such a little business. M. H. Mendleson tells, in *Gleanings*, about using a six-ton set of springs, and driving with a 24-mule team over roads with curves so short the driver couldn't see the leaders—"this, too, on one of the most dangerous passes, where the least bad driving out of the track would land all hundreds of feet down, none living to tell the story." In six days from landing in the bean-fields, he has generally had his hives filled with honey and the queens crowded.

Bees Breaking Rules.—It having been fairly well settled that bees do not thin the base of foundation, L. L. Skaggs comes forward in *Southland Queen* and says he has a hundred combs in which the base is thinner than the base of the foundation given. He also has known bees to seal queen-cells when the larvae were not over two days old, and says: "I have torn them open and the bees have fed them for several days and sealed them again, and it hatcht out a good queen; so it is with all fixt rules with bees—they delight in breaking them."

Virgin Queen with Prime Swarm.—Editor Lehzen says when a prime swarm is delayed by unfavorable weather until a young queen is piping in a cell, the swarm is sure to issue on the advent of fine weather, the young queen slips out of the cell in the confusion, and accompanies the swarm. Usually in such case the laying queen is stung, and the colony not being satisfied with the virgin queen, returns to the hive. In a few days the prime swarm issues with the young queen. He had one case the past season when seven young queens issued with a prime swarm!

Eggs that Would't Hatch.—To the few instances of eggs not hatching is added another reported in *Southland Queen*, by J. S. Worley. Eggs were placed by the queen in the cells, food sometimes placed around the eggs, but in a few days all would be cleaned out. A frame of brood in all stages was given from another hive, and this was taken care of all right. A frame of the defective eggs was given to another colony, which gave food to the eggs, but they would not hatch. The queen was kept a month, but in that time not more than half a dozen cells were capt.

May Sickness—a trouble of bees in Europe, and thought by some to be the same as bee-paralysis—has at least this in common with the American disease, that neither its cause nor its cure is well understood. Of late, in different quarters, the lack of pollen has been assigned as the cause of the disease. M. Bertrand, editor *Revue Internationale*, thinks that if pollen figures at all in the case, it is rather because of the bad quality than of its entire absence. The few cases that he has noticed in his four apiaries could not certainly be due to penury in that respect, as pollen was plenty and in excess.

Honey-Tea.—Julius Steigel relates in *Bienen-Vater* that he used to smile when he read of Pastor Knelp's patients taking a glass of honey-tea after each noon-day meal, and now he does the same thing himself, only he takes his before breakfast. Bronchitis had become so bad he couldn't speak above a whisper. Used up his means doctoring, tried all sorts of remedies, finally tried a teaspoonful of honey in half cup warm water in the morning. Little by little he improved till no trace of the disease remained. But he continues the daily practice of the morning allowance to the benefit of his digestive as well as breathing apparatus.

Plain Sections made from Old-Style have been put up by the ton by J. E. Crane, and his plan will, no doubt, commend itself to many. He has arranged an arbor for a saw-table so he can put on two saws 1 9-16 inches apart, and coming up just 1/8 inch above the table. He runs the four sides of the sections through, and the edges are left clean and white, much neater than by hand scraping. Thinks a strong man could saw down as many in a day as he would clean of propolis, perhaps more. The sections look undeniably neater, and while he has received no higher price, his honey has sold more promptly, which on a falling market might amount to a cent a pound.—Review.

No-Wall Foundation.—While many have been experimenting with drawn foundation with its high walls, Michigan bee-keepers have been experimenting with foundation having no walls, members of the State Association having had a mill made producing an article without any walls whatever, running 16 square feet to the pound. The editor of the *Review*, after seeing samples from Mr. Bingham, who produced a nice little crop in 1897, using no-wall foundation exclusively, thinks it worthy of a most thorough trial. L. A. Aspinwall, after using 3 or 4 pounds of the foundation, reports very favorably in *Review*. He says it requires an expert to detect any difference between the finish product and the natural comb. He thinks it possible that in a poorer season results might not be so satisfactory. The tendency to warp he considers quite an objection, but thinks it may be overcome by fastening the foundation on three sides. On the other hand, Mr. Bingham had no trouble of this kind, as is plainly shown by a beautiful picture showing 13 of the unfinished sections.

THE AMERICAN BEE JOURNAL

GEORGE W. YORK, EDITOR.

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UNITED STATES BEE-KEEPERS' UNION

Organized to advance the pursuit of Apiculture; to promote the interests of bee-keepers; to protect its members; to prevent the adulteration of honey; and to prosecute the dishonest honey-commission men.

Membership Fee—\$1.00 per Annum.

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GENERAL MANAGER AND TREASURER—Eugene Secor, Forest City, Iowa.

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EDITORIAL COMMENTS

[NOTE.—The American Bee Journal adopts the Orthography of the following Rule, recommended by the joint action of the American Philological Association and the Philological Society of England:—Change "d" or "ed" final to "t" when so pronounced, except when the "e" affects a preceding sound.

Much Excellent Reading-Matter now in our hands must wait its turn for insertion. It seems to us we never had such an abundance of good contributions and of such varied character. Especially is this true of matter for the departments of "Questions and Answers," "General Items," and "Convention Proceedings." Of the latter we have reports of these meetings: Colorado, Michigan, Vermont, Wisconsin, Central Texas, and the Northeastern Ohio, Western New York, and Northwestern Pennsylvania, besides the balance of the Northwestern's report, which is now appearing in weekly installments.

We trust no one will get impatient with us, for we are doing the very best we can to crowd in reading-matter as fast as possible. We would like to add extra pages for awhile, in order to get caught up, but to do so would cost more than we can afford at the price the Bee Journal is published weekly. But we really believe that we could fill, with good reading matter, a 32-page paper the size of these pages, and not half try. Perhaps some day we can reach that. In the meantime, please don't be too hard on us if we fail to print your contributions as promptly as you think we should.

Bees Taxable in Iowa.—Hon. Eugene Secor, of Forest City, Iowa, the General Manager of the United States Bee-Keepers' Union, has kindly sent us the following regarding the taxing of bees in the State where he resides:

For the benefit of Iowa bee-keepers who may not happen to be informed on the subject, allow me to say that under the present law bees are taxable in excess of 10 colonies.

Heretofore bees have not been taxable in this State. The change in the law may be a bit of news to some. I have already received personal enquiries from friends in regard to it, hence this statement.

It can no longer be said that bee-keepers in Iowa are enjoying special privileges.

EUGENE SECOR.

The New Union Delegates to the Pure Food and Drug Congress, now in session in Washington, D. C., are General Manager Eugene Secor, Rev. Emerson T. Abbott, a member of the Union's Board of Directors, and Secretary Dr. A. B. Mason. Mr. F. Danzenbaker was selected as an alternate, so that if, at the last moment, any one of the regular delegates were unable to attend, he would be right there on the ground to step into the work.

We feel that the United States Bee-Keepers' Union will be ably represented, and that the whole bee-keeping industry will thus have their wants made known in an effective manner.

We shall look for some interesting reports from the New Union delegates upon their return from Washington. We trust that the work done by this congress may result in great good to producers of pure honey, as well as to all other industries that are so vitally interested in the enactment and enforcement of a rigid national pure food law.

We do not know who are the delegates from the National Bee-Keepers' Union, but we presume they were duly appointed, and are in attendance upon the sessions of the pure food congress.

The National Bee-Keepers' Union election of officers held in January, resulted in the practically unanimous re-election of the following who have for years managed its affairs:

President—Hon. R. L. Taylor; Vice-Presidents—G. M. Doolittle, Dr. C. C. Miller, Prof. A. J. Cook, Hon. Eugene Secor, and A. I. Root.

General Manager, Secretary and Treasurer—Thomas G. Newman.

There were 129 votes cast, out of a membership of about 300.

General Manager Newman, when announcing the results of the election, said that some who were elected "state that their time is too much occupied with other duties to fill the office for 1898; this, however, is the business of the Advisory Board to attend to, as well as to fill vacancies, should any occur." We do not know who have declined to serve, but doubtless they will be known when their successors are named.

Bee-Keepers' Rights in Germany.—At Weinheim, Germany, there is a patent-leather factory, whose skins when spread out were covered with spots supposed to be dropt by the passing over of bees from a neighboring apiary. Suit was brought to have the bees removed. It was not proven that the bees were the culprits, and, besides, bee-culture was necessary for the sake of fertilizing fruit. If this case should go against the bees, numerous other factories would follow suit, and bee-culture as well as fruit-culture suffer great damage. Fruit-culture was in Weinheim before the leather factory, and in this case the weak must be protected against the strong. The case was dismissed.

Subscribers Criticising the Bee-Papers.—Editor Hutchinson made a call for the views of his readers as to the Bee-Keepers' Review, asking them freely to mention faults as well as merits. As was natural, few of them mentioned faults (unless it were the faults of rival bee-papers), but a collection of extracts from the letters makes very interesting reading. One man is brave enough to say he doesn't like to see advertisements of a free bottle of medicine, awakening a desire for more at a high price, because of the temporary effect of the alcohol in it. Another thinks it would be an improvement if the writers would limber up as if talking to their fellows, instead of being so very staid with the burden of their dignity and responsibility. It might be a good thing for the writers of the American Bee Journal to take to heart this last criticism. The man that has a good idea, and can

tell it in the plainest language, just as if talking quietly with a friend, is the writer who will be read with the most pleasure and profit.

We have often invited our own readers to feel free to criticize the American Bee Journal, and whenever they think they have a suggestion that they believe might help in improving it, to feel free to send it to us. We are not perfect, by any means—neither is the Bee Journal—but we are endeavoring to give as good a bee-paper as we can for the money we have to expend upon it. Of course it is not, by a long ways, up to our ideal of what a perfect bee-paper should be, but just give us about 10,000 regular, prompt-paying subscribers, and we will begin to show you a bee-paper something like the one we have in mind. This "Barkis is willin'" to do his part as soon as the bee-keepers of this country will give him the opportunity. Until then, the Bee Journal will be made just as good as we can make it under existing circumstances.

Wisconsin Farmers' Institutes.—Mr. N. E. France, Wisconsin's Foul Brood Inspector, has sent us a copy of the 300-page Bulletin No. 11, or "Wisconsin Farmers' Institutes," edited by Supt. George McKerrow; 60,000 copies are published. It contains an article on "Keeping Bees for Profit," by Mr. Jacob Huffman, and "Foul Brood Among Wisconsin Bees," by Mr. France. Very good pictures of Messrs. Huffman and France appear in connection with their contributions.

In Mr. France's article we find a report that he was enabled to make in connection with his work in 1896 in Wisconsin. It shows 51,709 colonies of bees, valued at \$258,545; 2,585,450 pounds of honey sold for \$180,981; and beeswax and queens to the value of \$9,500, making a grand total of nearly half a million dollars. If all the figures were known for the whole State, it would total nearer one million dollars, we believe.

We do not know how the book referred to is to be circulated, but by addressing Supt. Geo. McKerrow, Madison, Wis., no doubt a copy can be secured.

Honey Snow-Cream.—Mr. C. J. Baldrige, of New York, thinks the following combination is superior to ordinary ice-cream:

One cup rich sweet cream; $\frac{1}{2}$ cup extracted honey of decided flavor; mix and cool thoroughly, then stir in fresh, light, feathery snow till it crumbles, and serve at once. This will be enough for four good dishes.—Gleanings.

Better not wait until next summer to try the above—it's wholly a winter dish, apparently.



Mr. ALBERT UNTERKICHER, of Riverside Co., Calif., writing Feb. 12, says:

"The outlook at this writing for a crop of honey for 1898 is very thin for California, unless we get abundant rains."

Mr. GEO. WALKER, of Ontario Canada, says of our pamphlet, "Honey as Food:" "It is the best little thing I have seen in years. I am sure it will sell the honey." Better send us 50 cents and get a trial lot of 50. Every family ought to read it.

Mr. A. P. REED, of Merced Co., Calif., sends the following testimony concerning the American Bee Journal:

"I enjoy reading the Bee Journal very much. Its weekly visits are looked forward to with fond anticipation, and I am always realizing—have not yet been disappointed."

KEEPING THE HONEY DEMAND SUPPLIED, after once working it up, should be the constant endeavor of every bee-keeper. Of course your own crop will run out—perhaps it did long ago. Then, why not buy honey to furnish your customers, and not compel them to wait until another season? We have a large quantity of both pure extracted alfalfa clover honey and basswood, the former in 60-pound cans, and the latter in small barrels holding 280 pounds net. Quite a number of bee-keepers in various parts of the country have had honey from us, and say it gives most excellent satisfaction. One-barrel orders of the basswood, or 4 cans of the alfalfa, we ship f. o. b. Chicago at 6 cents per pound. Or for 8 cents in stamps we will mail you a small sample first. Get a trial shipment, and see how it goes. You should be able to make good wages at selling honey from now until next summer, as the canned fruits and other things put up last fall by the thrifty housewives will be running short now, and they will be more likely to want honey to take the place of fruits, etc.

Mr. FRANCIS DANZENBAKER, Editor Root says in Gleanings, "is one of the most progressive bee-keepers he ever met." In proof of the statement Mr. Root acknowledges that to Mr. Danzenbaker belongs the credit of a number of the apian improvements in recent years. He says:

"I believe in giving credit where credit is due, and I will say that Mr. Danzenbaker was the first one to show us the advantage of the dovetailed or lock corner; improved construction in hive-covers; improved construction in bottom-boards; the D. case—this letter D. simply representing Danzenbaker; improved method of crating hives; and last, but not least, directly and indirectly the advantages of fences and plain sections."

That sounds pretty good for Mr. Danzenbaker, and yet, just think of the blame that will be given him for causing so many changes in apian fixtures! Changes cost money to every bee-keeper who indulges.

Mrs. A. J. BARBER, of Montezuma Co., Colo., when sending us her renewal subscription, also included with it a dollar for her membership fee in the United States Bee-Keepers' Union, and also one dollar for the Langstroth monument fund. Regarding this fund, Mrs. Barber said:

"I think if we bee-keepers don't raise at least \$200 for the monument, we are an ungrateful set, and I shall feel ashamed of our selfishness."

Just so. Bee-keepers should do the generous and just thing to the memory of the lamented Father Langstroth. We hope that due gratitude will be shown in the erection of a monument that will reflect credit upon the living, and be a proper mark of honor to the dead.

THE MONTREAL WITNESS is one of the strong kind of weekly newspapers. Its principles and convictions are not for sale. Here is what one of the best Canadian religious weeklies thinks of the Witness:

"Nowhere, we think, is there a press of higher moral tone than that of our beloved country. It possesses, we think, the unique distinction of having a leading journal in its largest city which for over 50 years has been a moral crusader, a champion of reform. In all that time it has not published one liquor, or tobacco, or theatrical advertisement. At the sacrifice of much money it has stood true to its high principle, and stands foursquare, a tower of strength, against all the winds that blow."

Mr. H. E. HILL, of Pennsylvania and Florida, has been engaged to edit the American Bee-Keeper, beginning with the February number. For a year or so back that paper has been running some 16 pages (or half of its contents) in "plate matter," composed of a miscellaneous assortment of short stories, anecdotes, etc. This is all omitted now, and the size reduced to 16 pages, filled with strictly bee-reading. Quite an improvement. We hope Mr. Hill will not find that he has undertaken an "up-Hill" job.

Mr. W. R. GRAHAM, of Hunt Co., Tex., wrote as follows Jan. 31:

"I have been taking the American Bee Journal regularly for over 20 years, and am not tired of it yet. It is always a welcome visitor. I have been a bee-keeper from boyhood, and am now over 70 years old. I have been learning all the time—not all learned yet."

QUESTIONS AND ANSWERS

CONDUCTED BY

DR. C. C. MILLER, MARENGO, ILL.

[Questions may be mailed to the Bee Journal, or to Dr. Miller direct.]

A Case of Ignorance.

O. O. Poppleton says (page 92) that I was wrong in thinking that one glass in a wax extractor would make as hot work as two. That shows he can tell a good deal better by trying a thing than I can by guessing at it.

Edwin Bevins is troubled to understand (page 88) why I should misunderstand "Iowa" (page 39), and thinks there was an open space between the brood-frames and the cushions. The guess Mr. Bevins makes as to what misled me is partly correct, but not the whole of it. The "empty supers" mentioned had something to do with it, and also the fear that the bees might starve. It didn't occur to me that any one would think of bees starving right on top of sealed combs.

I'm much obliged to these good friends for correcting me, and glad to know such sharp eyes are upon me, for many is the time when answering so many questions that a fear comes over me lest I may mislead in my answers. I'm not sure, however, that some of the rest of you wouldn't make mistakes both in understanding and answering if you were in my place. Questions of so many different kinds, sometimes needing answer when I've hardly time to study over them; sometimes spelt in such way that it is a serious problem to make anything out of them (for example, "woushe" in a letter this week meant "wish"); sometimes spelling all correct but writing so illegible that I can't tell what the spelling is; sometimes having an overstock of ignorance on the subject inquired about—say, friends, if you'd spell me a spell you'd wonder I don't get more things twisted.

C. C. MILLER.

Leaving Bees Packt till Putting on Sections—Workers Going with the Queen when Mating.

1. Will it be right to leave my bees all packt as in winter, on the summer stands, leaving all the packing till time to put on sections? The hives are 8 to 10 inches apart. Most of them are as they were in the fall.

2. Do any worker-bees accompany the queen when she goes on her wedding-tour? They are never quiet till she comes home to the hive.

ANSWERS—1. Yes, providing they are well supplied with stores.
2. I don't know. Perhaps they do.

IOWA.

Telling from Which Hive a Swarm Issued.

Suppose I have 30 colonies of bees, and I go out some day and find a swarm clustered on a tree. How am I to tell from which colonies it issued?

NOVA SCOTIA.

ANSWER—The nicest way is to have the wings of the queen clipped, then watch what hive the swarm returns to. If your queen is not clipped, hive the swarm or get it in some kind of a box and take it away from where it is clustered (it will make it a little surer if you put it in a cellar for the time being), then take a handful of bees from the swarm, dust them well with flour, and watch what hive has the powdered "ladies" return to it.

Getting Increase and Other Questions.

1. I started last spring with four two-frame nuclei, which developed into four apparently strong colonies. They are in 8-frame dovetailed hives, in winter-cases, packt with chaff. If they come through the winter in good condition, I want to increase as much as I can consistently, regardless of honey. What method shall I pursue? I have eight acres of orchard for them to commence on.

2. As the days here during the summer are quite warm, and the nights cool, I kept the hives in the winter-cases during the summer. Would bees kept thus be liable to need further ventilation?

3. Will it be advisable during the heat of the day, in the early spring, to remove the cover of the winter-case for an hour or so, to warm up the hive, previous to removing the packing?

4. If so, about what should the temperature in the sun be?

5. Are there any external indications when they are getting short of feed?

EASTERN WASHINGTON.

ANSWERS—1. The first thing to do is to thoroughly inform yourself on the general principles of bee-keeping, if you have not already done so, by thoroughly studying a good text-book. For there are so many changing conditions to meet, that it is not easy to put down any cast-iron rule of procedure. Moreover, the text-

books will give you plans for increasing, which you can use separately, or more or less in combination, according to the exigencies of the case. Possibly for the largest safe increase without caring for a crop of honey, nothing is better than the nucleus plan. By that means you can always keep your colonies strong without running the risk of having the season close with a lot of weaklings on hand.

2. Probably they would. The opinion seems to be gaining ground that it is decidedly advantageous to have very free entrance below, for ventilation during the honey harvest.

3-4. When the thermometer goes up to 50 degrees in the shade, not cloudy, and the air still, if a colony fails to start flying, it may be well to give it a hint to do so, either by doing as you suggest, or by pounding on the hive.

5. Hardly any that you ought to wait for. The carrying out of young brood, that is, the white skins or pieces of skins, is a good sign that starvation is approaching, but you ought not to wait for that.

Laying Worker-Bees.

On page 2 Mrs. L. C. Axtell writes of "laying workers." I am perplexed to know what she meant by "laying workers."

CONN.

ANSWER—A laying worker is just what its name implies—a worker-bee that lays eggs. When a colony is queenless and has no means of rearing another queen, it is likely to happen that eggs will still be laid. Formerly it was supposed that a single bee did the laying, but closer investigation shows that a number of workers, if not a majority in the colony, engage in the unusual occupation of laying eggs, which eggs produce living bees, but in no case anything but drones. Get a good text-book and read up all about them.

Changing Brood-Frames—Self-Spacing Frames.

1. My bees are on frames 12 inches deep by 19 long. Would you change to the Standard Langstroth frame?

2. Is the 10-frame Langstroth hive better for wintering than the 8-frame?

3. Do you like self-spacing frames better than the common?

WISCONSIN.

ANSWERS.—1. That's a very difficult question to answer. It's a very troublesome thing to have two kinds of frames, and if you have had good success with the ones you have, and if you have nearly as many hives as you think you will want, I should do a good deal of thinking before making a change. If you have only a few, and you think you can do about as well with the standard frame, then you may be wise to change, if for no other reason than that you can more readily and more cheaply get what's in fashion. Moreover, if you want to buy or sell colonies of bees, it will be better to have the regular frame.

2. Yes and no. Left to themselves, a colony in a 10-frame hive is safer for wintering in most cases than in the 8-framer. The two additional frames make it almost a sure thing that there will be more honey in the hive, consequently less danger of starvation. With sufficient care and proper management the 8-frame hive may be as good or better. Given two colonies equal in every respect, one in an 8-frame hive, the other in a 10-frame, each with the same amount of stores, and I'd rather risk the smaller hive for wintering, if for no other reason than that there is less room to keep warm.

3. After a few years' trial with the self-spacers, I must say I give them the preference decidedly. If there were no other reason, the quickness and exactness of spacing would turn the scale in their favor.

Preventing After-Swarms—Getting Bees Out of Supers, Etc.

1. What is the best, quickest and surest way to prevent all after-swarms?

2. If a person wishes to get as much honey as he can from his bees, would it help to prevent after-swarming?

3. When you pile several supers of honey on top of each other for the purpose of getting the bees out, what escapes do you use above and below, how many supers do you put together, and how long does it generally take to empty them?

4. I would like to know if you think my bees are all right. I winter them in the cellar where vegetables and tobacco (not very much of the latter) are kept. The thermometer is never under 38 degrees, and hardly ever over 42 degrees. I open the window once every week to let in fresh air. The bees are in the Heddon hives with the cover and bottom-board tight, but the entrance is open full width. I clean out the dead bees about twice a week with a wire hook. As yet very few have died. When I go into the cellar I cannot hear the bees, but when I put my ear close to the hive I can hear them just faintly humming, but sometimes they hum pretty loud when they are disturbed a little. I wintered four colonies in the same way last winter, successfully, except in one weak colony the unoccupied combs were a little mouldy.

IOWA.

ANSWERS—1. When the colony swarms, set the swarm on the old stand, putting the old hive close beside it. Six or seven days later take the old hive away and set it on a new stand. The field-bees will all go back to the swarm after returning from the field,

weakening the old colony so much that it will give up the notion of swarming. In most cases it would be sufficient to move the old hive to a new location at time of hiving the swarm, but it will weaken it a good deal more to wait a week, for lots of bees are hatching out every day.

2. That depends. With you in Iowa, probably you will get more surplus to throw all the strength possible into the swarm, (unless, indeed, the bees are satisfied not to swarm.) If, however, the bees should swarm very early, (in some places they swarm in April), and the main honey-flow comes late enough so the swarms could not take advantage of it, then it might be that more surplus could be got from the old hive, prime-swarm and after-swarm than if the after-swarm was prevented. But in Iowa, it's pretty safe to say, that every after-swarm you hive cuts down your honey crop.

3. The supers are piled 10 or 15 high, altho 8 is much better than 15; a Lareese escape is put under the pile with free chance for the bees to get out under the escape, and a Lareese escape is put on top, unless, better still, a large cone escape is put on top. If piled early in the day on a bright day when bees fly well, an hour or two may empty them, otherwise a few may stay in all day. Of course a high pile will not be cleared so rapidly as a small one.

4. As a rule, 38 to 42 degrees is too cold for a cellar. But there is no little difference in thermometers, and it is just possible that an exact thermometer would show that your cellar never gets below 40 degrees. At any rate, no matter what the thermometer says, if the bees say its all right it is all right. That is, if they keep as quiet as yours are. But isn't it a good deal of care to go down twice a week to clean out the dead bees? Possibly its only fun for you, but its not so certain that the bees like it. Better raise the hives half an inch or an inch higher from the bottom boards at front, so as to give more room, and then you needn't trouble cleaning them out so often. My bees have now been in the cellar more than nine weeks and the hives don't seem to need cleaning out yet, and probably will not be cleaned out till they are taken out in the spring.

Cleated or Fence Separator.

Please describe a cleated separator. Is a cleated and a fenced separator one and the same? I have been using a frame (of my own make) with a no-bee-entrance section for 14 years, but if there is anything better I want to know it. WISCONSIN.

ANSWER.—Fence, fence separator and cleated separator are all one and the same thing. Instead of the separator being all in one piece, it is in several pieces, perhaps four, the pieces being $\frac{1}{4}$ inch or less apart, and fastened together by cross-cleats on each side, these cleats being $\frac{1}{2}$ inch or less wide, and about $\frac{1}{8}$ thick, altho these figures might vary. Perhaps yours may be the same thing, and at any rate it might be useful if you would report about yours.

Wintering Out-Doors—Chaff Hives—T Supers.

1. I want to keep quite a number of bees, and want to winter them on the summer stand. What is the best and the cheapest way? ☐ ☐ ☐

2. Please give me your opinion as to which are the best two and simplest chaff hives that are manufactured, or the best in every respect for comb honey.

3. Is the T super better, or as good, as others?

NEW JERSEY.

ANSWERS.—1. That's a very difficult thing to answer. Locations vary, and even in the same location one man will winter bees better in one, and another in another way. Perhaps as cheap a way as any good way is to have the hives close together, well protected beneath and on all sides except perhaps the front with leaves, planer shavings or something of the sort. But to give full minutiae would take more room than can be given here, and you will do well to study up the whole subject in a good bee-book.

2. There is nothing impossible about there being a dozen different kinds of chaff hives, and yet as I don't remember ever to have heard of more than one, I'm not able to give an intelligent reply to your question.

3. Opinions differ very much as to what is the best surplus arrangement. After trying wide frames and T supers on a large scale, and a number of other surplus arrangements on a smaller scale, I have never been able to find anything that suits me so well as the T super. Of course, something depends on knowing just how to use a surplus arrangement in the best way.

Wintering Bees in Tennessee.

I began keeping bees last April (1897). I have been a constant reader of the American Bee Journal since that time, and owe what success I have had in the bee-business to it, and the failures I charge to myself. I am in trouble now, and look to you, through the American Bee Journal, to help me out. Our winter here has been very warm, and bees have been able to fly almost every day up to 10 days ago. In the fall I contracted the entrance to about 4 inches, and left all the supers on the hives. I thought this would be a good plan here to winter on the summer stands. Yesterday (Feb. 4) I opened the hives (it being warm enough for the bees to fly), and found water on the top of frames and in the super, and the bees seemed to be buzzing as if hot (in fact they were). One colony had died. The combs and sections in the supers were damp

and moldy. I opened the entrance the full length. Was this right? Should I take off the supers? I have told you the condition they are in, now please tell me the remedy, and to save the other colonies. I have 18, all Italian, and two imported queens, which I purchast direct from Italy. TENNESSEE.

ANSWER.—What made you leave sections on your hives over winter? Please don't do that again. Just as soon as the bees stop storing, take off all sections so they will be fresh and nice to use another season. There may be no objection to leaving a super on without sections, but you can fill it up with leaves, planer shavings, or something of the sort, and not spoil the sections. The trouble is that your hives were too close, the moisture from the bees not having a chance to escape. You did the wise thing to open the entrance full width. That will give the hives a chance to dry out. If the winter continues as warm as it has been, it may be well to open up a very little on top, so as to allow the moisture to escape in that direction.

Question on Packing Bees for Winter.

I have packed the super with dry sawdust and chaff, with two passage-ways in each frame about $\frac{1}{4}$ way from the top of the frames, and about 2 inches space over the brood-frames. The bee-entrance to each hive is one inch deep and 5 inches long, with wire-screen covering, with a bee-passage at the bottom to keep mice out, which gives good ventilation. I have a shade-board in front of the hive, and have the hive-cracks, etc., all filled with clay, also top and back of the hive covered with boards, with good, tight covers on the hives. The hives are about 8 inches from the ground, with plenty of ripe honey, and at this time the hives are covered with about 2 feet of snow. Now, what changes would you make to winter bees out-doors? MAINE.

ANSWER.—Possibly you might make an improvement on the sawdust (which some consider a little heavy). Dry leaves are well liked, and whether because better or more convenient, planer shavings are popular. If you mean there are 3 inches of empty space directly over the brood-frames, I should say that it might be an improvement to have barely enough space for bees to cross over from one frame to another. If I understand correctly the entrance is covered with wire-cloth, all but enough at the bottom to allow a bee to pass through, the wire-cloth having meshes too fine for a bee to pass. Possibly that could not be improved, and possibly it would be better to have the whole entrance covered with wire-cloth having about three meshes to the inch. That would allow a bee to pass through at any point while effectually excluding mice. But if your bees winter perfectly it will be pretty good evidence that even such slight changes are not needed.

The remainder of your questions, relating to the culture of fruit-trees, belong to a horticultural rather than an apicultural journal.

The T Super vs. Pattern-Slats.

What advantages do you find in T supers over pattern-slats?

I am much troubled with the slats, and if the T supers are no better, somebody should get up one that is. Some of the slats sag a little, other supers sag a good deal. When they are tiered up two may be so far apart the bees put comb between them, while others come so close they stick them together with bee-glue. Hold forth regarding this. ILLINOIS.

ANSWER.—I'm not sure what you mean by pattern-slats, but suppose you mean what are called "section-holders," consisting of a wide frame without any top-bar, the bottom-bar being scored out to fit the sections. My experience with this sort of surplus arrangement is very limited compared with the T super, having used the latter in large numbers for years. The editor of Gleanings cannot understand how I can prefer the T super. Possibly if he were as familiar as I am with it, he could understand it better. There's a good deal in being used to a thing, and learning to take advantage of all the little points. Possibly if I should use section-holders as many years as I have T supers, I should find more good in them. But to answer your question.

First, I may mention one thing in which the T super has not an advantage over the section-holder. When the central sections are about finish the outside row of sections can be jumped into the middle of the section-holders, and this cannot easily be done with the T super. This is the great point claimed for the section-holder, but as I do not consider it the best practice so to shift the sections, the advantage does not count with me. The T super is more easily filled than the section-holder, for the sections can be put in the T super as rapidly as they can be set in a row on a table. It is much easier to empty a T super than a section-holder. The T super has T tins which are so firm that there is not the least tendency to sag, whereas the sagging of the section-holder may make trouble. But go slow about changing to the T super until you find they are better in your hands. There are some little kinks in using them that must be learned to get the most benefit from them.

The McEvoy Foul Brood Treatment is given in Dr. Howard's pamphlet on "Foul Brood; Its Natural History and Rational Treatment." It is the latest publication on the subject, and should be in the hands of every bee-keeper. Price, 25 cents; or clubbed with the Bee Journal for one year—both for \$1.10.

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In the multitude of counsellors there is safety.—Prov. 11-14.

Publishing Honey Crop Prospects.

Query 69.—Is it wise for the bee-papers to publish reports as to the honey-crop, or crop prospects, as reported by bee-keepers from various parts of the country? Some think that to do so is apt to injure the market price of honey.—OHIO.

E. France—In my opinion, yes.

Prof. A. J. Cook—Always let on the light. So I say, yes.

G. M. Doolittle—Possibly there is something in it; but I like to read the reports, all the same.

W. G. Larrabee—I like to hear the honey crop reports, but I hardly think it wise to publish them.

A. F. Brown—I do not know. I like to read what others are doing, their failures as well as successes.

Chas. Dadant & Son—You might as well withhold the crop reports of wheat, hogs, etc. Don't keep the light under the bushel.

R. L. Taylor—Yes. It may sometimes injure the market price, and sometimes improve it, and will always aid in fixing the price where it ought to be.

J. M. Hambaugh—On the theory of "Where ignorance is bliss, 'tis folly to be wise," the reports might be unwise. Let us have the reports, however.

Dr. J. P. H. Brown—I am liberal enough to believe that correct reports do no injury to the producer; but, on the contrary, he can work such reports to his benefit.

C. H. Dibbern—1. Yes, general information is what we all need to conduct our business on intelligent principles. 2. No, it only adapts the market to prevailing conditions.

Wm. McEvoy—When any bee-keeper sends in an honest and very fair report of the honey crop in his locality, I believe that the editors of all bee-papers are in duty bound to publish such reports, and should.

Rev. M. Mahin—It is as wise to publish reports of the honey crop as of the corn or wheat crops. In case the reports are not favorable the tendency will be to increase the price. I think the truth should be published.

Emerson T. Abbott—I can see no special objections if bee-keepers are disposed to report the result of their season's work. As for myself, I am not in the habit of saying much about my private business in public print.

Dr. C. C. Miller—That's a troublesome question. Harm is sometimes done by rose-colored reports, but it's more the fault of bee-keepers than bee-papers. It would hardly do for the papers to suppress information. We want to know, you know.

J. A. Green—If we could have regular reports from reliable men in the various honey-producing localities, they would be of great value. Ordinary correspon-

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That covers the whole Apicultural Field more completely than any other published, send \$1.25 to Prof. A. J. Cook, Claremont, Calif., for his

Bee-Keeper's Guide.

Liberal Discounts to the Trade.

PATENT WIRED COMB FOUNDATION

Has No Sag in Brood-Frames

Thin Flat-Bottom Foundation

Has No Fishbone in the Surplus Honey.

Being the cleanest is usually worked the quickest of any Foundation made

J. A. VAN DEUSEN,

Sole Manufacturer,

Sprout Brook Montgomery Co., N. Y.

Please mention Bee Journal when writing.

BEE-KEEPERS! Let me send you my 64-page Catalog for 1898.
J. M. Jenkins, Wetumpka, Ala.

Please mention Bee Journal when writing.

dents seldom mention anything but good yields. This is misleading, and often has a very injurious effect. I think this was particularly the case during the past season.

Eugene Secor—If bee-papers do not publish reports of the honey crop, how are we to know what the crop is? It is the prospective honey crop that injures the business, especially when great things are published that do not come to pass.

Jas. A. Stone—Decidedly, yes! It is the only way we have of knowing what our honey is worth. I have often seen bee-men who do not read the bee-papers, sell their honey (because they had a large crop) for 10 cents per pound, when it was worth 15 cents in Chicago.

G. W. Demaree—Wise or unwise, our bee-periodicals would be awfully "dry" if they for any cause failed to give us the news from the honey-fields. The consuming world do not see the bee-papers. Besides all this, some of us despise the tendency of the times to "sail under cover," that is, hide facts. Few apiarists now living believe in "over-production" of honey.

J. E. Pond—In my opinion it is advisable for bee-papers to give items of news that affect the honey interest in any wise. I do not see how any one can be injured by their so doing, and the honey crop is so varied in various sections that I cannot see how the market price can be injured thereby. It is not the news that raises or lowers the price, but the actual question of supply and demand, a rule of political economy that is inflexible.

Mrs. L. Harrison—I think that it is an injury to the pursuit. No one can tell what the harvest will be, until it is removed from the hive. As an example, a man came into this city in the early autumn with choice white section honey, which he offered for 8 cents per pound. A groceryman who purchased said at the time it was "worth 12 cents, but that was his own figure." He had read of the great crop, and being a poor salesman, wanted to sell before it came to market freely.



Poor Prospects for California.

I think we are in for another poor season, if not a dry year. All rains have been followed by hard north and east winds, which have dried out the soil again, and this section of the State looks dry and barren. This time in the year we should have a nice green growth of vegetation. Many people are worried, and stockmen are losing from starvation on the ranges. Hay is nearly double its usual price, and those having hay for sale are holding for exorbitant prices.

M. H. MENDLESON.
Ventura Co., Calif., Jan. 3.

How to Get Alsike Clover Sown.

Feeling that I am so much indebted to the American Bee Journal, it is a duty as well as a privilege to answer one question, or to tell my experience. Some weeks ago I was reading of one bee-keeper that said he had tried to get his neighbor farmers to sow Alsike clover seed. He had told them of all its good qualities, and they said he

Only 6 cts. per Pound in 4 Can Lots or Over.



Finest Alfalfa Honey!

IT SELLS ON TASTING.

The Honey that Suits All Who Buy It.

We can furnish **White Alfalfa** Extracted Honey, in 60-pound tin cans, on board cars in Chicago, at these prices: 1 can, in a case, 7 cents per pound; 2 cans in one case, 6½ cents; 4 cans (2 cases) or more, 6 cents. The Cash must accompany each order.

A sample of the honey will be mailed to an intending purchaser, for 8 cents, to cover postage, packing, etc. We guarantee purity.

GEORGE W. YORK & CO., 118 Michigan Street, CHICAGO, ILL.

We want

EVERY BEE-KEEPER

.....To have a copy of.....

Our 1898 Catalog

Send us your name and address and we will take pleasure in mailing you a copy.

G. B. LEWIS CO., WATERTOWN, WIS.

Special Agent for the Southwest—

E. T. ABBOTT, St. Joseph, Mo.

Mr. Abbott sells our Hives and Sections at factory prices.



Bingham & Hetherington
Uncapping-Knife.
PAT. 1879.

PRICES OF BINGHAM PERFECT

Bee-Smokers and Honey-Knives!

Smoke Engine (largest smoker made) 4-in. stove. Doz. \$13.00; each, by mail, \$15.00	
Doctor.....3½ in. stove. Doz. 9.00; " 1.10	
Conqueror.....3-in. stove. Doz. 6.50; " 1.00	
Large.....2½ in. stove. Doz. 5.00; " .90	
Plain.....2-in. stove. Doz. 4.75; " .70	
Little Wonder (weight 10 ounces) 2-in. stove. Doz. 4.50; " .60	
Honey-Knife.....Doz. 6.00; " .80	

Bingham Smokers have all the new improvements. Before buying a Smoker or Knife, look up its record and pedigree.

FIFTEEN YEARS FOR A DOLLAR; ONE-HALF CENT FOR A MONTH.

Dear Sir:—Have used the Conqueror 15 years. I was always pleased with its workings, but thinking I would need a new one this summer, I write for a circular. I do not think the 4-inch Smoke Engine too large.

January 27, 1897.

Truly, W. H. EAGERTY, Cuba, Kansas.

Mr. Bingham, Dear Sir:—Please send per mail a 4-inch Smoke Engine. I have one of your Smokers; it is too small in time of trouble.

February 21, 1898.

A. F. SEWARD, Riverside, Calif.

9A9t

T. F. BINGHAM, Farwell, Michigan.

Page & Lyon Mfg. Co. ☐ New London, ☐ Wisconsin,

Operates two sawmills that cut, annually, eight million feet of lumber, thus securing the best lumber at the lowest price for the manufacture of

Bee-Keepers' Supplies.

They have also one **One of the Largest Factories** and the latest and most-improved machinery for the manufacture of

Bee-Hives, Sections, Etc.,

that there is in the State. The material is cut from patterns, by machinery, and is absolutely accurate. For Sections, the **clearest and whitest Basswood** is used, and they are polished on both sides. Nearness to Pine and Basswood forests, and possession of mills and factory equip with best machinery, all combine to enable this firm to furnish the

Best Goods at the Lowest Prices.

Send for Circular and see the Prices on a Full Line of Supplies.

Please mention the American Bee Journal.

7Atf

REID'S TREES

ARE RELIABLE.

Everything grown in Reid's Nurseries is healthy, well-rooted and true to name. Every effort is made to save expense to customers. We sell direct and ship direct, saving fifty per cent. on Trees, Shrubs, Vines. Write for catalogue, estimates or suggestions. Try Star Strawberry, Eldorado Blackberry. REID'S NURSERIES, Bridgeport, Ohio.



Listen! Take my Advice and Buy

*** Your Bee-Supplies ***

of August Weiss!

I DEFY
competition
in
Foundation

FINE FOUNDATION
AND TONS OF IT.
Working Wax into Founda-
tion a Specialty.

Millions of Sections—Polisht on both Sides!!

SATISFACTION GUARANTEED on a full line of Supplies. Send for a Catalogue and be your own judge. Wax wanted at 26 cents cash, or 28 cents in trade, delivered to me.

AUGUST WEISS, Hortonville, Wisconsin.

To Seed Buyers

One class caters to the patronage of those who are misled by overdrawn pictures and statements that are untrue. Another class takes advantage of the fears of those, who, through a natural desire to secure the best seeds, will pay fancy prices for what often proves to be very ordinary stock. **THERE IS YET ANOTHER** class which seeks the trade of those, who want the best seeds possible to obtain and are willing to pay a reasonable price for them. **TO THIS CLASS OUR CATALOGUE BELONGS.** It is mailed FREE to those who write for it.

**Shaw's System
of Pasturing
Sheep...**

This pamphlet is given away
to our customers.

There are
3 classes
of Seed
Catalogs.



Our STERLING
Brand of Grass and
Clover Seeds represent
the best quality
obtainable.

**NORTHROP, KING & CO., Seedsmen,
26 to 32 Hennepin Ave.
Minneapolis, Minn.**



Ho, for Omaha!

As we have many customers in the Northwest, and believing they will appreciate the low freight rate obtained by purchasing goods from a railroad center nearer to them than we are, getting a direct through-freight rate, thus cutting the freight in half, we have established a branch house at 1730 South 13th St., Omaha, Neb., where we will keep a complete line of all Apian Supplies, the same as we do at Higginsville, Mo. With the quality of our goods, we believe most bee-keepers in the West are already acquainted, but to those who are not, we will say that our goods are par excellence. Polished, snowy-white sections, beautiful straw-colored transparent Foundation, Improved Smokers and Honey Extractors, and all other first-class goods, are what we sell. Kind and courteous treatment and honorable dealing our motto. On these bases, we solicit an order, feeling sure that if we sell you one bill of goods you will be our customer in the future.

PROGRESSIVE BEE-KEEPER, 50c per year. "Amateur Bee-Keeper," 25c. Both for 65c., postpaid. Sample copy of the PROGRESSIVE free, and a beautiful Catalog for the asking.

Address, **Leary Manufacturing Company**, Higginsville, Mo., or 1730 South 13th St., Omaha, Neb.

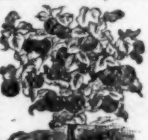
THE HATCHING HEN

HAS LOST HER OCCUPATION and in the production and brooding of chicks she has been supplanted by the better and every way **RELIABLE INCUBATORS AND BROODERS**. They Hatch and Brood when you are ready. They don't get lousy. They grow the strongest chicks and the most of them. It takes a 324 page book to tell about these machines and our Mammoth Reliable Poultry Farms. Sent by mail on receipt of 10 cents. Send for it now. **Reliable Incubator and Brooder Co., Quincy, Illinois.** 37D171 Please mention the American Bee Journal.



\$300. for Six Potatoes!

We shall introduce this year for the first time the wonderful new **MORTGAGE LIFTER** POTATO and shall pay the above sum in prizes for the best six potatoes grown from one seed potato. **THE EARLIEST POTATO IN THE WORLD.** Tested 4 years. It is white, of excellent quality and a **MAMMOTH YIELDER**. Be the first in your neighborhood to try it; next year you can sell it to others. Price this year, 50 cents for Single potato. **First in the Market Cabbage** is the earliest to head; beat your neighbors by weeks. **Sure Head Cabbage**, all head and sure to head; large size, good quality and good keeper. Single heads have weighed up to 60 lbs. **Climbing Cucumber**, entirely new—a perfect wonder. Climbs any trellis or support 6 to 8 feet high; prolific early fruiter. **Six Week's Turnip**; earliest grower, easy grown, good size and white as snow. **EARLIEST TOMATO IN THE WORLD**—greatest success for earliness, smoothness and quality. Has fruited in 50 days. **Big Prizes Awarded** for ripe tomatoes grown in least number of days. Instructions with seed. **One whole potato by mail** (packed from frost) instructions for prizes and a packet each of the five early vegetables and catalog of "SEEDS THAT GROW" for 25c. **Fairview Seed Farm, Box 88 Rose Hill, N.Y.**



was looking out for his bees, and they did not sow any.

Now, I wish to tell how I work it. Last spring I ordered of George W. York & Co. 50 Alsike clover leaflets, and made a list of about 20 farmers around me, took the list and the leaflets to the postmaster (he being an intimate friend of mine), told him what they were and my object, and those that had not gotten their mail that day we slept one in their box, and those that had received theirs were left until the next day, so each of these men received a leaflet, and didn't know where it came from, and in a few days they were talking about Alsike clover, and all could talk intelligently.

One man came to me and said he had received a circular on Alsike clover (I told him I had one, too), and that he was going to get some seed when he got his other to sow the farm that joins our place.

I think I am safe in saying that there were 50 or more acres of Alsike clover sown mixt with other seed. I shall do the same thing again this spring. J. W. P.

Reports for Several Years.

I brought to this place 26 colonies in the fall of 1893. I lost 25 in the cellar, and in 1894 I started with one colony, bought two nuclei, and increased to eight. In 1895 I started with eight, increased to 26, and sold 1,000 pounds of comb honey. I then wintered 24, and in 1896 increased them to 52, sold 2,600 pounds of comb honey, and wintered 50. In 1897 I increased from 50 to 100, reared 70 young queens, and sold about 900 pounds of honey, all told. In 1897 I had to depend upon others to look after the bees; this shows that all of us do not work the same.

The last was a very poor year for me, at least in the way of gathering honey, tho most of my neighbors did not get one pound of honey of any kind. C. CHANK. Oscoda Co., Mich., Jan. 24.

Wiring Frames—Report.

I wish to give my way of wiring frames. Instead of punching holes in the end-bars for the wires, I use $\frac{3}{8}$ -inch blind staples. My frames are 8 inches deep inside, and it takes four staples in each end-bar. One is placed one inch from the top-bar, and one the same distance from the bottom-bar; the other two 2 inches apart between the end staples, all on the inside of the frames. I drive the staples about two-thirds their length, and crosswise of the bar, then weave the wire through the staples and fasten the end of the wire with a small tack, then tighten up the wire and fasten the other end; then if I find the wire too slack, I can tighten it to a nicety by driving the staples to any depth that is called for.

The staples are inexpensive, as one pound will be plenty for 25 hives, 10 frames to the hive.

My honey crop last season was 2,000 pounds from 35 colonies, spring count. The honey sold for \$200. I can't put an estimate on the fun I had with the bees.

WM. M. BARNES.

Richland Co., Wis.

The Season of 1897.

The last season was not a very successful one, yet much better than the three preceding years. I started last spring with seven colonies, increased to 15, and secured 100 pounds of choice comb honey, and 200 pounds of extracted, of No. 1 quality. The bees built up well on apple-bloom. Later, white clover was very plenty, yet it did not yield much nectar on account of wet weather. In July Alsike clover was in full bloom, and the bees made up for lost time in gathering honey and in swarming. The honey was the best I have ever secured. The extracted candied as early as the middle of October. The latter part of October we had very hard frosts, which killed all of the fall flowers, so the bees could work no more, yet they swarmed with nice, large queens with them. Something I never saw before, bees swarming with no chance of



WHERE OTHERS FAIL

the **SUCCESSFUL INCUBATORS** succeed, why? because they are properly constructed and the correct methods for operating them are plainly set forth in our 72 page Direction Book. Our machines will please you. Prices reasonable. All sold under a positive guarantee which we ask you to compare with others. Send 6c stamps for 128 page catalog and poultry book combined. **It will pay you.** Address **DES MOINES INCUBATOR CO., Box 78, Des Moines, Iowa.**

gathering honey. Is that a common thing for bees to do? I have since heard that some of my neighbors' bees did the same thing. We had plenty of fall rain, with good prospects of more white clover next season. Success to the American Bee Journal.

JOHN H. WHITMORE.

Jackson Co., Mich., Jan. 28.

PAID FOR Cash Beeswax

For all the **Good, Pure Yellow Beeswax** delivered to our office till further notice, we will pay 25 cents per pound, **CASH.** No commission. Now if you want **cash, promptly**, for your Beeswax, send it on at once. Impure wax not taken at any price. Address as follows, very plainly,

GEO. W. YORK & CO.

118 Michigan st., CHICAGO, ILL.

Queens, Bees and Bee-Keepers' Supplies

Tested Queens in April and May, \$1.00. Untested, 75c. Choice Breeders, either three or five-banded Italians, at \$2.00. Choice Imported Breeders, \$5.00. Satisfaction guaranteed. Send for Price-List to

F. A. CROWELL,

84tf GRANGER, MINN.
Please mention Bee Journal when writing.



SEE THAT WINK!

Bee - Supplies! Root's Goods at Root's Prices.

Ponder's Honey - Jars, and every thing used by bee-keepers. Prompt service, low freight rate. Catalogue. **Walter S. Ponder,** 512 Mass. Ave., INDIANAPOLIS, INDIANA.

Texas Queens

Best honey-gathering strain in America. Tested, \$1.50. Untested, \$1.00. Write for a Circular. **J. D. GIVENS, Lisbon, Tex.** 7A26t Please mention the Bee Journal.



45Dtf Please mention the Bee Journal.



GOOD WHEELS

MAKE A GOOD WAGON. Unless a wagon has good wheels it is useless. **THE ELECTRIC WHEELS** are good wheels and they make a wagon last indefinitely. They are made high or low, any width of tire, to fit any skid. They can't get loose, rot or break down. They last always. Catalog free. **Electric Wheel Co., Box 16, Quincy, Ills.**

Please mention Bee Journal when writing.

HONEY and BEESWAX MARKET QUOTATIONS.

Chicago, Ill., Feb. 21.—Fancy white is not plentiful, and sells at 11c.; good No. 1, or grade of that character is abundant, and sells at 7 to 8c.; amber and dark, 7 to 8c. Extracted, white, 5 to 6c.; amber, 4 to 5c.; dark, 4c. Beeswax, 26 to 27c.

Much of the comb honey is granulating this season.

Detroit, Mich., Feb. 1.—Fancy white, 11 to 13c.; No. 1, 10 to 11c.; fancy amber, 9 to 10c.; No. 1, 8 to 9c. Darker grades are selling lower and in better supply, and can be bought at 6 to 7c. Extracted, white, 5 to 6c.; darker grades, 4 to 5c. Beeswax is in good demand at 26 to 27c.

Indianapolis, Ind., Jan. 15.—Fancy white, 11 to 13c.; No. 1, 10 to 11c.; fancy amber, 9 to 10c. Extracted, white, 5 to 6c. Beeswax, 25 to 27c. Market appears to be well supplied and sales are rather slow for this time of the year. This is especially true of the amber and dark grades of comb honey. Beeswax is in good demand.

Milwaukee, Wis., Jan. 24.—Fancy white 1-lbs., 11 to 12c.; A No. 1, 11 to 11½c.; No. 1, 10 to 11c.; No. 2, 8 to 9c.; No. 1 dark, 8 to 9c. Extracted, in barrels, kegs and cans, white, 5½ to 6c.; dark, 5 to 5½c.

The supply of honey is good and the quality very nice as a general thing. The demand is not up to our desires, yet we are hopeful it will improve and all will be wanted at fair value. We feel like sustaining prices, and continue to quote as above.

St. Louis, Mo., Feb. 9.—Fancy hite comb, 10 to 11c.; No. 1, 10c.; amber, 9 to 10c.; dark, 8 to 9c. Extracted, white, 5½ to 6c.; amber, 5 to 5½c.; dark, 4 to 4½c. Beeswax, 20 to 22c.

Boston, Mass., Jan. 18.—Fancy, in cartons, 12½ to 13c.; in glass, 11 to 12c.; A No. 1, 10 to 11c.; No. 1, 9c.; No. 2, 8c.; No. 3, no sale. Beeswax, 27c.

The demand for honey is light on all grades, with a full supply. Pure beeswax is in good demand, but supply is light.

Philadelphia, Pa., Jan. 18.—Fancy white, 10c.; No. 1, 9c.; amber, 8c. Extracted, white, 5c.; amber, 4c.; dark, 3½c. Beeswax, 28c.

Late arrivals of California honey have demoralized our market.

Kansas City, Mo., Feb. 19.—Fancy white comb, 1-lbs., 10c.; No. 1, 9 to 10c.; amber, 8 to 9c.; dark, 7 to 8c. Extracted, white, 5 to 5½c.; amber, 4½ to 5c.; dark, 4c. Beeswax, 20 to 22c.

The supply of honey is large and the demand light.

Buffalo, N. Y., Feb. 11.—Strictly fancy 1-pound combs are in quite good demand from the fact that it has been so scarce and closely cleaned up, and 1½ is quite easily obtained. Other grades do not sell much better, possibly a little, ranging from 9 to 10c., as to grade, etc. Extracted ranges from 4 to 6c., and is in light demand. We can recommend shipping strictly fancy and nothing else, unless you cannot do better.

San Francisco, Calif., Feb. 16.—White comb, 1-lbs., 7½ to 9½c.; amber, 4 to 6c. Extracted, white, 4½ to 5c.; light amber, 3½ to 4c.; dark tulle, 1½ to 2½c. Beeswax, fair to choice, 24 to 27c.

Market is ruling steady for choice to select qualities of both comb and extracted, but more especially for the latter, owing to light stocks and a fair demand, both on local account and for shipment. Increased quantities are expected to be consumed in the course of a few weeks, owing to observance of Jewish holidays. Dark grades are not readily salable, and where custom is secured for this sort, very low prices have to be accepted. Not much beeswax on market, and there does not appear to be the slightest possibility of there being any excess of stock during the balance of the season.

Minneapolis, Minn., Jan. 31.—Market is in an overloaded condition on comb honey. Good chance for fancy white extracted at 5½ to 6c., but comb 1-lb. at a standstill, particularly if other than fancy white. Best price available on fancy white combs is 10½c., and buyers are slow at that. Darker grades or broken lots are unsalable. If shippers would send in their extracted when it is wanted, and not push undesired comb (and vice versa) the stuff would move more advantageously to all concerned. The trouble is, when a fair price is obtainable some shippers hold out for more and in the end lose by it.

New York, N. Y., Feb. 9.—There has been a fair demand for comb honey of late, and we are gradually reducing our stock. Fancy white is scarce and finding ready sale at 10 to 11c.; off grades white and amber, 8 to 9c.; mixt and buckwheat, 6c. Extracted is in fair demand—California white, 5½c.; light amber, 5c.; white clover and basswood, 4½ to 5c.; buckwheat, 4c.; Southern, 50c. a gallon. Beeswax is steady at 26 to 27c.

Cincinnati, Ohio, Feb. 21.—There is a slow demand for all kinds of honey. We quote 10 to 13c. for best white comb honey, and 3½ to 6c. for extracted. Beeswax is in fair demand at 20 to 25c. for good to choice yellow, with a fair supply.

Cleveland, Ohio, Feb. 22.—Fancy white, 12 to 13c.; No. 1, 11 to 12c.; No. 1 amber, 9 to 10c. Extracted, white, 6 to 6½c.; amber, 4 to 5c. Beeswax, 23 to 25c.



\$100

Given as Bounties to purchasers of the improved Danz. Hives and Sections. See schedule in my bee-book "Facts About Bees." Tells

how to produce honey that sells for the most money. Free for 2c in stamps. Address

THE A. I. ROOT CO., Medina, Ohio, or **F. DANZENBAKER, Box 466, Washington, D. C.**



BEE-KEEPERS' SUPPLIES!

Largest and Best equip

Factory in the

SOUTH-WEST.

Send for Catalog.

FRED A. DALTON,

1A26t WALKER, Vernon Co., Mo.



44A26t Please mention the Bee Journal.



MAGIC PRESS

& HOT PLATE FOUNDATION FASTENER.

This Press is of malleable iron and brass. Non-breakable chimney. Its speed equal to 4000 per day, or more, according to activity of operator. One closing and opening of gate finishes the section. Starters or full sheets. This year a Fine Egg-Tester goes with it. Write me if your supply dealer does not keep them in stock.

JAMES CORMAC,

3Dtf **DES MOINES, IOWA.**

BEES, HONEY, MONEY

Queens for Business.
Supplies at Bottom Prices.

"Bee-Keeping for Beginners," price 50 cents, imparts the instruction. Price-List free.

J. P. H. BROWN, Augusta, Ga.

Please mention Bee Journal when writing.

Talk about Comb Foundation

We can now furnish the very best that can be made from pure wax. Our New Process of **Milling** enables us to surpass the previous efforts of our ourselves and others in the manufacture of Comb Foundation.

**It is always Pure and Sweet.
It is the kind that does not sag.
It is the kind you want.**

If you once try it you will have no other. Samples furnished **FREE**. Large Illustrated Catalog of all kinds of

Bee-Keepers' Supplies,

And a copy of the American Bee-Keeper, sent upon application. Address,

**THE W. T. FALCONER MFG. CO.,
JAMESTOWN, N. Y.**

Please mention Bee Journal when writing.

NEW YORK, is the city,
105 Park Place, is the street,
I. J. STRINGHAM, is the man

Who is prepared to ship you, on short notice, **anything** in the apiarian line.

Are YOU the man who wants to buy?

Send for Catalog, anyway.
Please mention Bee Journal when writing.

CARLOADS—



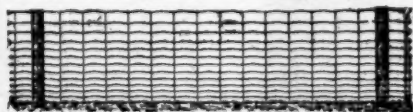
Of Bee-Hives, Sections, Shipping-Cases, Comb Foundation, and **Everything** used in the Bee-Industry.

We want the name and address of every Bee-Keeper in America. We supply Dealers as well as consumers. We have Dry Kiln, Improved Machinery, 40,000 feet of floor space, and all modern appliances. We make prompt shipment.

Write for Catalogs, Quotations, etc.

**Inter-State Manufacturing Co.,
HUDSON, St. Croix Co., WIS.**

Please mention Bee Journal when writing.



You Can Buy

the material in a 75-cent jack-knife for five cents or less, and make your own knife—but you don't. Think about it when some one asks you to buy a machine and wire to make your own fence "cheap."

PAGE WOVEN WIRE FENCE CO., Adrian, Mich.
Please mention Bee Journal when writing.

COMB FOUNDATION Wholesale and Retail.

Working Wax into Foundation for **CASH** A Specialty.

Hives, Sections, and a full line of Supplies. The best of everything. Write for Catalog, with prices, and samples of Foundation and Sections.

BEESWAX always wanted for cash or trade.

GUS DITTMER,

AUGUSTA, WIS.

Please mention Bee Journal when writing.

The A. I. Root Co.'s Goods Wholesale and Retail.

Including their discounts for Goods wanted for use another season. It will pay you to send me list of Goods wanted. **M. H. MUNT** Cash for Beeswax. **BELL BRANCH, MICH.**

Please mention Bee Journal when writing.

21st Year Dadant's Foundation. 21st Year

Why Does It Sell So Well?

Because it has always given better satisfaction than any other.

Because **IN 21 YEARS** there have not been any complaints, but thousands of compliments.

We Guarantee Satisfaction.

What more can anybody do? **Beauty, Purity, Firmness, No Sagging. No Loss. PATENT WEED PROCESS SHEETING.**

Send Name for Our Catalog, Samples of Foundation and Vell Material. We sell the best VELLs, cotton or silk.

BEE-KEEPERS' SUPPLIES OF ALL KINDS.

LANGSTROTH ON THE HONEY-BEE, Revised.

The Classic in Bee-Culture—Price, \$1.25, by mail.

CHAS. DADANT & SON,

Please mention the Am. Bee Journal.

HAMILTON, Hancock Co., ILL.

OUR MOTTO—"Well Manufactured Stock! Quick Shipments!"

SECTIONS, SHIPPING-CASES, AND BEE-KEEPERS' SUPPLIES.

We make a specialty of making the very best Sections on the market. The **BASSWOOD** in this part of Wisconsin is acknowledged by all to be the best for making the **One-Piece Honey-Sections**—selected, young, and thrifty timber is used.

Write for Illustrated Catalog and Price-List **FREE**.

MARSHFIELD MFG. CO., Marshfield, Wis.

Please mention the American Bee Journal when writing.

Reduced Prices On 1896 Style Hives.

In order to make room for stock of New Goods at our Chicago Branch, we offer the following list of 1896 Hives at these reduced prices to close out quick:

	5	10	20
50 No. 1 8-frame.....	\$5.00	\$9.00	\$17.00
25 No. 3	5.00	9.00	17.00
25 No. 1E, P. W.	4.00	7.00	13.00
80 No. 1, "	5.00	9.00	17.00
55 No. 5E.....	5.00	9.00	17.00
25 No. 5.....	6.00	11.00	21.00
25 No. 6E.....	4.00	7.00	13.00
20 No. 6.....	5.00	9.00	17.00
40 No. 5E..... 10-fr.	5.50	10.00	19.00
30 No. 5.....	6.50	12.00	23.00
25 Townsend Section-Presses.....	50 cts. each.		
13 Wakeman & Crocker Section-Presses.....	\$1.00 "		

Note.—The 1896 No. 5 Hives include a honey-board as well as foundation starters, and the No. 5E have these omitted. The No. 6 have the D section-case arrangement, complete with sections and starters; and the No. 6E the same, without the sections and starters.

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